

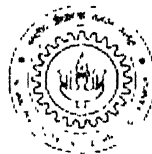
EFFECT OF INFORMATION TECHNOLOGY ON HOTEL OPERATIONS

**A Thesis Submitted
In Partial Fulfillment of the Requirements
For the Degree of**

MASTER OF TECHNOLOGY

By

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**To the
DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, KANPUR**

JANUARY 2001

This is to certify
Technology on Hotel C
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Certificate

This is to certify that the present work on "Effect of Information Technology on Hotel Operations" by Mr. Rajen Raha has been carried out under my supervision and has not been submitted elsewhere for the award of a degree.

January 2001



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I couldn't have been luckier, for Deepak Mittal, Anant P. Srivastava, Anupam Chandra and Anshuman Behera who are now among my best friends and one of the reasons I find myself enriched by the years at IIT.

I dedicate this thesis to my parents

Rajen Raha

Abstract

This study is about the Effect of Information Technology on Hotel Operations. A literature review was done on the role of Internet and its sister technologies, segment-of-one thinking, legacy nature of current technologies, traditional mindset of personnel, erosion of brand equity and brand loyalty, changing consumer behaviour in hotels. Further the Indian Hotel industry was studied with respect to its structure and issues of foreign investment. This helped in devising a basic framework and methodology to prepare Case Studies of three Hotels. These cases cover the type of facilities; the role of IT in the reservation process, the kind of reports maintained, information management & guest information services, marketing and sales. The cases were analysed with a focus on the differences in the extent of reporting for internal procedures, supervision and guest services. Also analysis was done on the role of IT in decision-making, the extent of data sharing, filtering & warehousing. And a discussion was done on the electronic presence of the hotels; further an analysis was done on the on-line sales of hotel services.

Differences in information management with respect to internal operations and guest services at various hotels emerged from the study. Also the differences of data sharing in hotel chains got highlighted. Conclusions are also drawn regarding the importance of various factors on which IT has an impact, like routine and non-routine decision making, and marketing & sales of hotel services.

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Chapter 1

Introduction

Hotels in order to remain competitive concentrate on meeting and exceeding every guest's expectation. Due to immense growth of competition in the tourism sector in recent times and more demanding customers, hotels have to focus more on their key operations and to apply better technology to deliver effective guest service. This requires good coordination between various departments. Further as the hotel tries to position itself as an extension of guest home, office and recreation center it needs to maintain data of customer preferences and customer history. All this calls for greater use of information technology in key hotel operations.

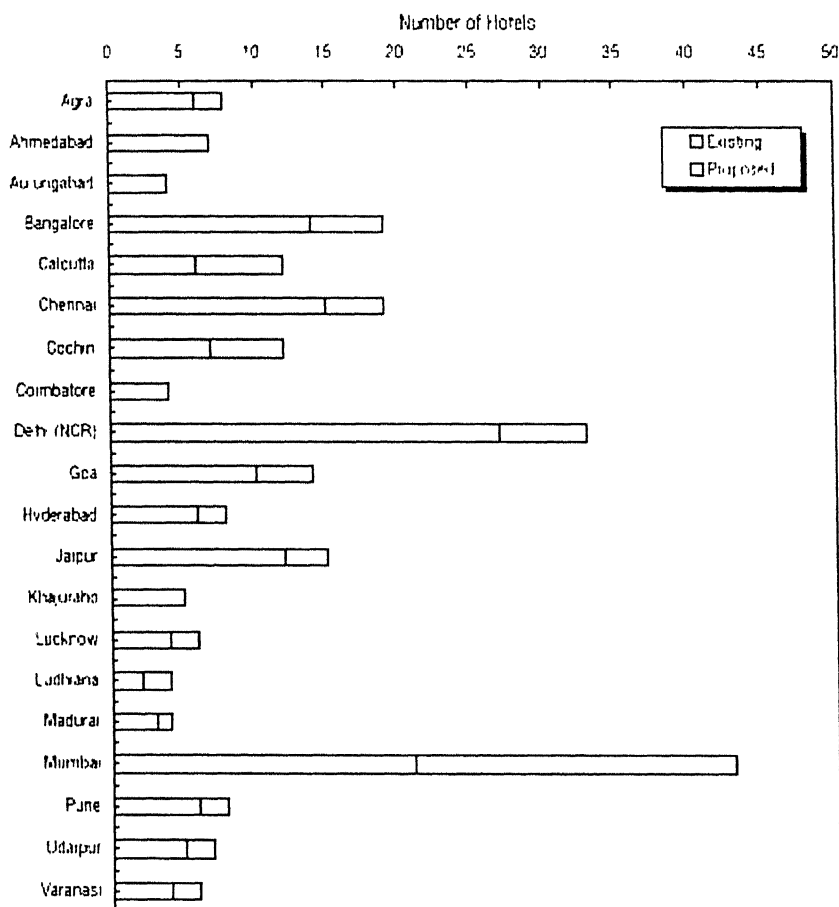
The hospitality industry worldwide is among the major consumers of Information Technology, both in the front office and back office. It is the corner stone of operational success of this industry, and also the marketing & selling interface to the customer. Through Information Technology, the industry reaches the consumer directly, builds business partnerships, promotes destinations and services and has cost and time saving.

In this thesis the role of IT in the reservation processes, information management at various departments & guest information services of hotels is studied. Further study is done on the extent of reporting for internal procedures, supervision and guest services in hotels. This also covers the role of IT in routine & non-routine decision-making by employees, the extent of data sharing in a hotel chain & across departments and filtering & warehousing of data. The study also includes the effect of IT on marketing and sales of hotel facilities.

1.1 Hotel Industry in India

Hotels in India are mainly concentrated on major metro cities like Delhi, Mumbai, Chennai, Calcutta; places of tourist attraction like Agra, Jaipur, Kajuraho, Varanasi; hill stations and beaches like Goa; fast growing industrial cities like Hyderabad, Bangalore; and important state capitals like Lucknow.

Distribution of Hotels in India in some key cities is shown in the Exhibit 1. Mumbai and Delhi, due to their commerce, tourism and government traffic have more hotels than other places.



Source: HVS International Research (2000)

Exhibit 1: Distribution of hotels in some Indian cities (year 2000).

As per the Hospitality and Tourism industry projections the number of foreign tourists visiting India is expected to touch 5 million and the domestic tourists are projected to touch 90 million by the end of the year 2001[10].

Currently, 89000 hotel rooms are required to support this growing boom as against the availability of approx. 60000 rooms. By 2005 the demand for hotel rooms is estimated to be of 100000 rooms. Growth of hotel accommodation, which constitutes the major and most essential plank of tourism infrastructure, has not taken place at a level commensurate with the targeted increase in tourist arrivals. This is largely owing to the constraints of spiraling land costs, high taxation, procedural delays in clearances etc. The following comparative chart (exhibit 2) shows the availability of hotel rooms in major tourist destination countries.

Exhibit 2: Availability of rooms in major tourist countries

Spain	USA	Italy	China	UK	Thailand	Canada	Indonesia	Malaysia	India
10008812	3600000	1724000	551044	402934	402000	327400	168000	155866	62000

India is way behind even from some of the Asian countries in room availability [10]. The Exhibit below shows that about 30% of the rooms in hotels in India fall under five star and five star deluxe hotels. Two and three star hotels constitute around 35% of all rooms in India [16].

Exhibit 3: Distribution Of Rooms By Category

Hotel class	No of hotels	No of rooms (%)
1 star	124	4,244 (7)
2 star	296	10,584 (17.4)
3 star	288	13,747 (22.9)
Heritage	42	1,012 (1.68)
4 star	72	5,180 (8.6)
5 star	54	7,518 (12.5)
5 star deluxe	42	10,734 (17.89)

1.2 Types of hotels in India

Hotels in India can be best categorized under the following factors

- Location
- Number of Rooms

- Type of plan and room rate
- Length of guest stay
- Facilities

Categorization as per location can be done as downtown hotels, suburban hotels, Resorts, Airport Hotels, Motels and Inn. Inns are basically small hotels with modest board and lodging facilities. They are found in almost all towns and cities in India. Categorization by the number of rooms can done as “small” hotels or inns with less than 25 rooms, those with 25 to 100 rooms are called “medium”, those with 100 to 300 rooms are called “large” hotels and hotels of more than 300 rooms are called “extra large” hotels. Hotels are also distinguish according to the type of plans they have, like some come under the American plan or continental plan where room rent includes meals and others are under European plan like where meal charges are not included. Most of the Indian hotels are under the European plan. Hotels are also categorized on the type of customer they usually have like business hotels, tourist or holiday resorts and luxury hotels. Luxury hotels are the most expensive of the three types. Hotels in India are also categorized under the star rating as per the facilities they offer.

1.3 Occupancy and Pricing of Indian hotels

Exhibit 4 reflects room occupancy, average rate and revenue per available room for the year 1999-2000[16]. Five Star Deluxe Hotels have highest occupancy status and pricing.

Exhibit 4: Operating Characteristics by Hotel Classification (1999-2000)

	Occupancy (%)	Average Rate (Rs)	Revenue per available room (Rs)
Overall Average	55.2	3502	1983
Five-Star Deluxe	60.5	5172	3145
Five-Star	56.4	3309	1866
Four Star	55.0	2188	1191
Three star	48.3	1453	702

In Exhibit 5 & 6 occupancy levels & average tariff in different cities is presented. Occupancy levels are high in Chennai, Bangalore, Hyderabad and Mumbai of above 60 %. Average tariff of hotels is higher in Mumbai than in other cities. Clearly Mumbai has average rates, which are above the national average in even the Five star deluxe hotels. Delhi's average rate is more than the national average in Five Star Hotels. Chennai on the other hand has an average rate, which is close to the national average of five star hotels.

Exhibit 5: Occupancy Levels and Pricing (average rate) in major cities

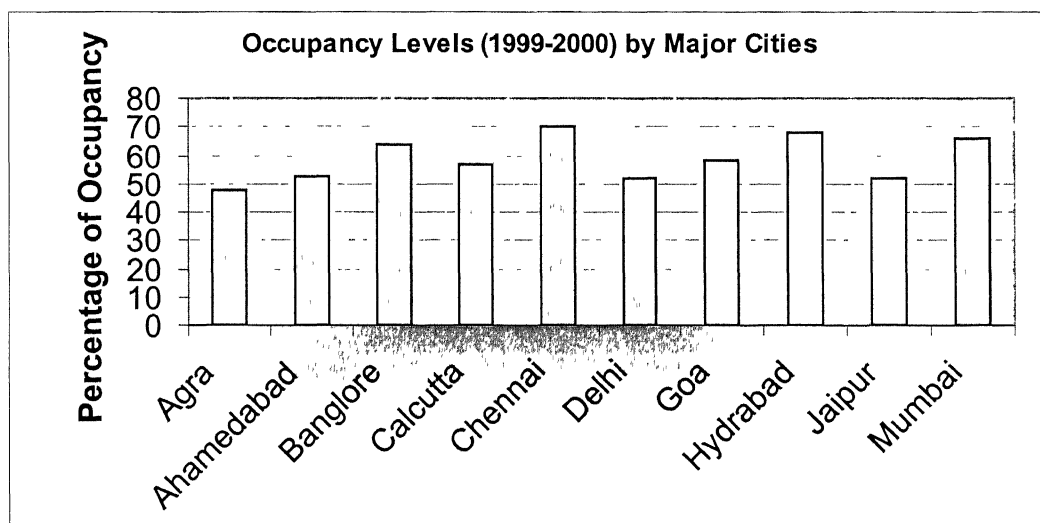
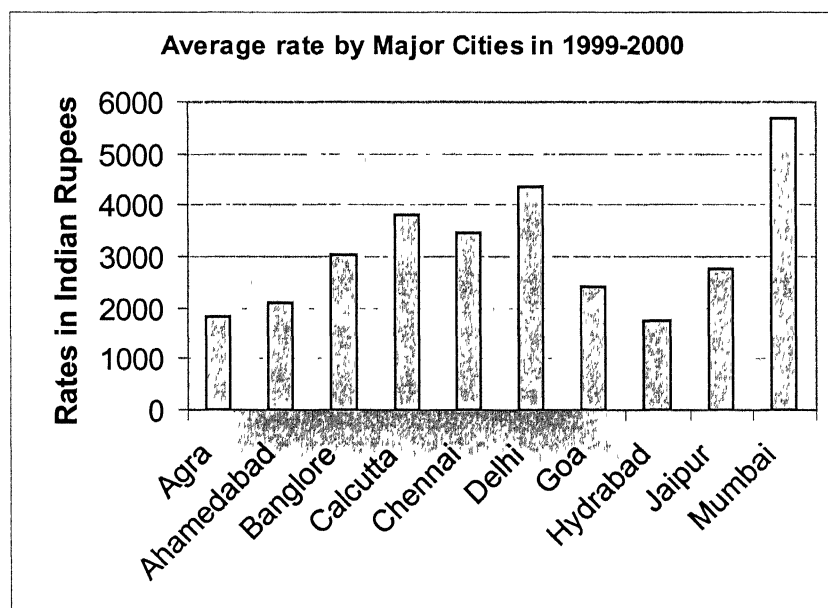


Exhibit 6: Pricing (Average Rate) in Major Cities



1.4 Indian Hotel Chains

Indian Hotels Company Ltd. operating under the Taj brand is the largest hotel chain in the country. East India Hotels operating under the Oberoi brand is the second largest hotel chain followed by ITC Hotels. Other major Hotels are Asian Hotels, Bharat Hotels, Oriental Hotels, and Hotel Leela Venture. The government made a foray into the hotel industry with the Ashoka chain of hotels, owned and operated by the Indian Tourism Development Corporation (ITDC). ITDC is now undergoing privatization. The UK-based Bass Hotels & Resorts, which owns the Holiday Inn, Inter-Continental, Crown Plaza and Parkroyal brands, is currently the number one in its line of business.

The eight major chains The Indian Hotels Company, East India Hotels Limited, ITC Hotels Limited, Asian Hotels, Bharat Hotels, Oriental Hotels, Hotel Leelaventure and ITDC represent 25% of total rooms available in India, and account for over 60% of the total revenue of the Indian hotel sector.

1.5 Internationalization

The Government of India has declared the Hotel and Tourism related industry as a high priority industry for foreign investment. It is now eligible for approval of direct investment upto 51% of foreign equity. Non-Resident Indian Investment is allowed upto 100% [10].

Most players, with the exception of Indian Hotels Company Limited and East India Hotels, have entered into marketing tie-up with major international hotel chains. Asian Hotels has tied up with Hyatt Regency an international hotel chain, Hotel Leela Venture have tied up with Kempinski, and ITC Hotels have a franchisee agreement with ITT Sheraton to use the latter's brand name.

For the Indian hotel owners and the international hotel chains the benefit is mutual. Tie-up with an international hotel chain puts the Indian hotel on the global map with access to the chain's reservation network worldwide. For the international hotel chain they can ride on the boom of the industry without making enormous capital investments. Association with international brand also plays a major role in image building and attracting foreign tourists. Taj does not have a

tie up. The Indian Hotel Company operates through its own brand name of The Taj West End in the International market. East India Hotel also does not have a tie up; it manages hotels in foreign countries on a contract basis.

In line with international practice, and following India's exchange liberalization, the Reserve Bank of India now has norms for automatic approval of foreign technology agreements in the hotel industry. These are subject to the following parameters:

- Technical and Consultancy Services (including fees for Architect, Design, Supervision etc)- Upto 3% of the capital cost of the project (less cost of land & finance)
- Franchising and Marketing/Publicity Support Fee- Upto 3% of net turnover (net turnover is gross receipts less credit card charges, travel agents commission, sales tax, statutory payments etc)
- Management Fees (including incentive fee)- Upto 10% of gross operating profit.

These norms are applicable provided the collaboration is proposed with companies running/managing hotel(s) with atleast 500 rooms.

Chapter 2

Literature Review on the Role of IT in Hotels

Literature on the use of IT in hotels is sparse. The present review is based primarily on Olsen & Connolly [4,6]

2.1 Internet, Intranets, and Extranets

The Internet and its sister technologies, intranets and extranets, are reshaping all aspects of business. According to Olsen & Connolly it is through these technologies that the concept of real-time becomes more pronounced in the eyes of the consumer [6]. As the supporting technologies improve, consumers will have instantaneous access to information about organizations and their product offerings without having to use an intermediary. They will be armed with the tools to easily and effortlessly shop at their convenience. Therefore, hospitality enterprises will need to focus on providing customers with real-time access to rates, availability, and product information. The Internet also provides hotels and restaurants with opportunities to redesign how they interface with their employees and their suppliers.

With respect to electronic commerce, the Internet enables more self-service oriented transactions. Customers are looking for convenience and the ultimate in price-value-quality relationships, and they want them quickly, without having to wait. The Internet helps in some regards, especially in the reservations booking process.

2.2 Segment-of-One

Mass production has never been accepted in the hospitality industry, and with today's consumers becoming more demanding and more diverse, the concepts of mass customization and catering to a segment-of-one become important [6]. Data warehousing and mining along with the Internet are examples of technologies that provide the industry with opportunities to develop the segment-of-one and exploit it to provide the ultimate in personalized service. This enables the firm to tap economic value from a customer over the long term. As a

result of the segment-of-one thinking, competition is shifting to the use of knowledge. In other words, those organizations that can collect and synthesize information and patterns about their customers, build a knowledge base about them, and convert this knowledge to a higher level of personalized service and value will be the industry leaders of tomorrow.

2.3 Use of Internet

From a customer's perspective, the Internet provides a new tool for shopping and product/service comparisons. The result is that they are more informed and more demanding for higher quality, better prices, and faster service. Real-time equates to immediacy and hassle-free service [6]. In order to meet this more demanding environment, organizations must be flexible and lean. Employee associates must be empowered and informed. Systems must be smart, flexible, and easy to use, and they must provide the guest with opportunities to shop, book, and pay in a secure transaction environment.

The Internet is also becoming the most sought-after amenity in hotel rooms. It provides communications access, information, entertainment, and education. However, the appropriate model for providing Internet technology in hotel guestrooms remains unclear. This dilemma is more pronounced when trying to determine the appropriate wiring scheme for a new hotel. Today, hotels are experimenting with a variety of approaches; yet, the lack of standards and the growing number of mergers between software companies and cable television providers make it difficult to predict the correct method of delivery be they: web-based television, network computers, laptop connections, or some other method yet to emerge [6]. A related issue is how to price Internet access and service fees to help recoup some of the hotel's investment in the technological infrastructure necessary to offer this amenity.

2.4 The Legacy Problem

One of the greatest challenges with the industry's current technology is its inflexibility. This problem stems from many factors, namely its dependency on legacy systems, cumbersome Programming languages, and the inability for

applications to effectively communicate and share data with one another. Presently, the industry lacks technology standards that define data requirements and record layouts for passing data between applications.

2.5 Assessing financial viability

The return on investment in IT is difficult to estimate because it is difficult to measure the success of information technology in terms of performance gains and direct improvement to the bottom line [6]. Traditionally, anticipating and subsequently measuring savings, increased revenues, or competitive advantage as the result of new technology has been difficult. This is due to the many intangible factors associated with information technology. Decision tools and criteria that will prove useful in assessing these factors, and for making difficult and complex decisions regarding capital resource allocations to IT are therefore needed.

2.6 Traditional Mindset

From a business perspective, the hospitality industry is steeped in tradition. The mindset of many of today's managers, formed as the result of experience and schooling, is based on traditional business models, which may no longer be applicable to the present-day industry context [4]. Much of the industry's history is based on craft: quaint hotels, individual charm, and personal servitude. Individual hotels were much like boutiques.

Traditionally, success has been based on meeting or exceeding every guest's expectations, regardless of the cost to the hotel organization. Today, the business model is changing as a result of more demanding stakeholders. Investors expect greater financial returns, while customers expect more value for less money. Trying to find the balance is the challenge. Technology offers one possible solution to help bridge the gap, but the industry can only be successful if it rethinks how it uses technology to deliver cost-effective guest service.

The industry often waits until consumers demand technology before actually providing it. As such, hospitality organizations are slow to adopt new, innovative technologies and software applications, and when they do, they

tend to replicate the existing methods of doing business rather than take full advantage of the benefits these technologies have to offer [6]. Consequently, the industry loses opportunities and credibility. The industry must be better prepared to meet the future needs of its customers.

2.7 Erosion of Brand Equity and Brand Loyalty

Many hotel companies are spending millions of dollars on quality improvements, brand imaging, marketing campaigns, and enhancements to guest loyalty programs in the hope that they can create a new sense of meaning and value to their brand identities [4]. Yet, a force working against this trend is the Internet. The Internet provides consumers with better tools to shop and compare products and services. With little effort, guests can quickly learn about the range of lodging accommodations within a given market that are suitable to their needs and fall within desired price ranges and quality thresholds. New shopping models and software agents are developing to expedite the search and procurement of hotel accommodations. Under these new methods, guests focus almost entirely on tangible factors rather than on intangible or emotional qualities, which are often emphasized in marketing programs.

A good example is an upstart like Priceline.com (www.priceline.com), which is shifting the decision-making away from brand and amenities in favor of price and location (i.e., city). Under this new model, consumers see hotel products as interchangeable. They place little or no value on brand, and when they do consider brand, they are not considering any particular brand, only a known entity so that there will be no surprises upon arrival. Thus, as the industry becomes more commodity-like, the primary deciding factor favors price over brand in a given location.

Another contributing factor to the erosion of brand value is a rise in the concept of e-branding of Internet-based travel channels. Recent moves by Microsoft's Expedia Travel (www.expedia.com) and TheTrip.com (www.thetrip.com) to offer their own forms of frequent travel programs threaten the stability of well-established frequent travel programs offered by leading travel

providers by giving consumers more flexibility and options to accumulate and cash in free travel awards. Since these new on-line travel programs are not tied to any program offered by a particular Hotel (e.g. Kerala Tour Package 2000 by the Taj Group), consumers can select any product or service offered by these mega, one-stop shopping services offered by the on-line travel agent (expedia.com or TheTrip.com). The net effect is further erosion of customer allegiance to any particular hotel. Instead, the loyalty is tied to the online travel agent. This event is just another indication that the rules of the game are changing and that the industry continues to operate in a hyper competitive environment, where an allied partner can soon become a primary competitor.

2.8 Changing Consumer Behaviour

The younger generation is becoming more sophisticated and skilled in how they shop with the aid of new technologies, most notably the Internet, search engines, and smart agents [4]. The smart agent is a kind of search engine driven by artificial intelligent software programs and neural networks [6]. It is programmed initially by the options put-up by the net surfer (consumer) but then continues to learn by itself what drives this human in terms of desires. It does this by remembering each decision made by the net-surfer throughout the decision-making process as he searches sites through the smart agent. Once enough of a history has been experienced, this software agent is often free to act on behalf of that person when choosing what products and services or hotel sites to enter. This tireless agent is constantly looking out for the interests of its master. It can shop many hotel or travel sites, far more than the human wants or has the time to explore. An early example of this form of technology at work can be seen by TheTrip.com's IntelliTrip product. With just a few quick keystrokes, a consumer can quickly and easily shop multiple on-line travel agencies or hotel sites. In this new model, the consumer never even visits the web site of the service provider. Such a model poses a great challenge to the hotel trying to reach the customer and appeal to his/her desires through the filter of the smart agent.

Consumers also have near-instant access to price and product comparison information about almost every product or service that they wish to buy. Moreover, they are becoming increasingly desensitized to advertisements and marketing information that is sent to them.

The Internet will be the booking channel of choice in the near future. Even though hotel bookings through Internet represent a meager one to two percent of all hotel bookings today, this number will grow to a level of significance in the near term.

Information technology impacts all aspects of a hotel organization's value chain and transcends all departmental and geographic boundaries. It represents the most influential competitive method for the hospitality industry [2]

CHAPTER 3

METHODOLOGY

3.1 OBJECTIVE OF STUDY

The objective of this thesis is to study the role of information technology in all spheres of hotel operations and its related effects.

3.2 METHOD OF STUDY

Judging by the uniqueness of the hospitality sector where very little information is available it can be interpreted that the best way to conduct an exploratory study is an interview-based preparation of case-studies of Hotels. The design of the interview-based study is such that minute details and opinions can be extracted to the best possible extent. For this a questionnaire was designed, to be administered to the following:

- Top level executives
- System administrator
- Marketing head
- Hotel staff in other departments

3.2.1 Structure of enquiry

The questionnaire consisted of short questions where choices were given to the respondent. There were also questions through which detail opinions were sought. The questionnaire is divided into three sections. The **first section** studied the effect of various software packages and their area of application, the amount of time to learn these packages and their major advantages or disadvantages; this was covered in form of two tables. This section also contained questions on the website features. The **second section** of the questionnaire was on hotel marketing and the role of IT in it. Questions on organization structure were covered in the **third section**.

The points covered in the first section included website features, and features of the software packages used in its basic operations, the kind of reports and records these software packages help to make or manage, time taken to make these reports and the advantage or disadvantage of these packages. The

person to be interviewed for this section of the questionnaire was the system administrator of the hotel.

The points that were covered in the marketing section of the questionnaire included aspects of quick adjustments to the market conditions, online advertisement, web casting and email, Forums, newsgroups, bulletin boards, web communities and relationship with Travel Agents.

The second section of the questionnaire was for studying the level of supervision, the coordination between various departments, the level of transparency, range of formalization, level of centralization and degree of complexity in the organization structure of the hotel.

To conduct the study, some hotels in Delhi, Lucknow, Allahbad and Kanpur were listed. The hotels were approached, three hotels were finalized. Then the interviews were taken in these three hotels, Hotel Taj Mahal Lucknow, Hotel Parkroyal New Delhi and Hotel Clarks Avadh, Lucknow. This data were subsequently incorporated into three cases, which are presented here.

Chapter 4

Case I: Hotel Taj Mahal, Lucknow

4.1 Introduction

The Taj group was started in 1902 by Mr. Jamshetji Nusserwanji Tata, who was refused admission into a British run hotel that announced the restriction of entry of Indians and Dogs! The first hotel to be started was the Taj Mahal Hotel, Bombay.

The Taj has established itself as the premier hospitality body in India. The Taj Group of Hotels have spanned all over India into industrial towns and cities, beaches, hill stations, historical and pilgrim centers and wildlife destinations.

The Taj Group targets the upmarket and leisure traffic segment, and to a lesser extent, the crew and conference segment. It is the market leader in the premium segment in India with 8,759 rooms world-wide. Owned and managed directly or through associate companies, it has achieved excellence in the food and beverage concepts, which has enabled it to export its technical services and consultancy. Its operations cover over 50 hotels in India & internationally, spans the entire gamut of the market across different brands and price segments. Branded as “TAJ” it is grouped into three strategic business units to get consistency across the different units in the same brand and standardize the product and service across the brands, making them distinct and identifiable

- Luxury,
- Business
- Leisure

Taj Luxury Hotels: Located in the main political and commercial cities of India they maintain the highest standards in all the services they offer. With exquisitely appointed rooms and modern comforts, these hotels offer the finest standards of hospitality and service. Located in Mumbai, New Delhi, Calcutta, Bangalore, and Chennai.

Taj Business Hotels: Located in the heart of India's key commercial towns, which are rapidly industrializing and expanding. The company anticipates that a significant portion of its long-term growth will come from the expansion of this brand and is actively seeking ways of strengthening and expanding this brand.

Taj Leisure Hotels: They can be categorized as idyllic beach resorts, genuine palaces, turn-of-the-century garden retreats and hotels located close to historic monuments, places of pilgrim and some of India's best wildlife sanctuaries.

4.1.1 Taj Mahal Lucknow

Taj Lucknow established in 1995 is in the business segment of the group and it runs a business centre in its premises. This well equipped Business Centre consists of two office rooms, a boardroom, and a business lounge with an attached library. The Business Center offers multimedia computers, laptops and cell phones beside Secretarial service. Further the hotel also offers auditorium style Meeting Rooms and Banquet Facilities consisting of 4 rooms with a capacity ranging from 20 to 500 persons for cocktails or receptions. The Gulistan Lawn can accommodate 250 to 300 persons.

4.1.2 Types of Accommodation

110 centrally air-conditioned rooms Including 4 suites.

Superior: Guests can choose from elegantly appointed Garden Facing or Pool Facing rooms that offer guest amenities like international direct dial facility, mini bar, channel music, Colour television with satellite channels, in-room Internet facility.

Deluxe: These rooms are large rooms on the ground floor with a separate sitting area and a poolside view.

Executive Suites: Elegantly appointed, Pool facing and garden facing two-room Units. These suites are well planned with a compact living area, a bedroom and bathroom.

Recreation at Taj Lucknow: In the hotel, croquet and other indoor games like chess, bridge or chaupar (an Ancient Indian game) can be organised. Also, golf at a nearby course, tennis and picnics in other parts of the city can be arranged on request.

Facilities and Services: Swimming pool, fitness center, beauty parlor, barber shop, travel desk, car rental, shopping arcade, currency exchange, cyber café, safe deposit lockers, doctor-on-call and babysitting, 24-hour room service and laundry service.

4.2 Organization Structure

The current structure is as shown in the exhibit. The General Manager, Taj Lucknow, reports, through the Chief Operating officer, to the Senior Vice President of the Business Division.

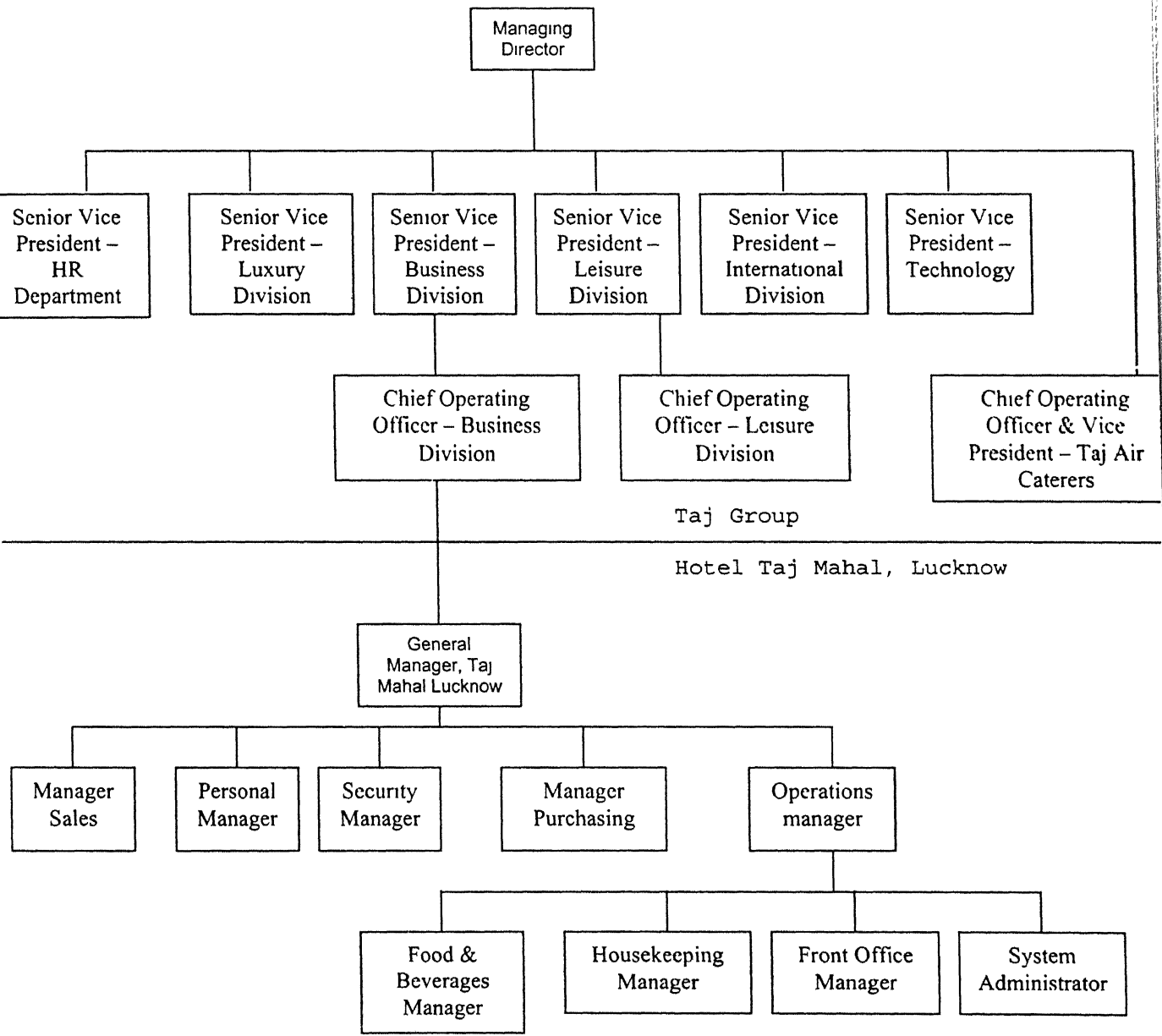


Exhibit 1: Organization Structure at Taj Mahal Lucknow

4.3 Information Management at the Front Office

The Front Office manages two kind of information

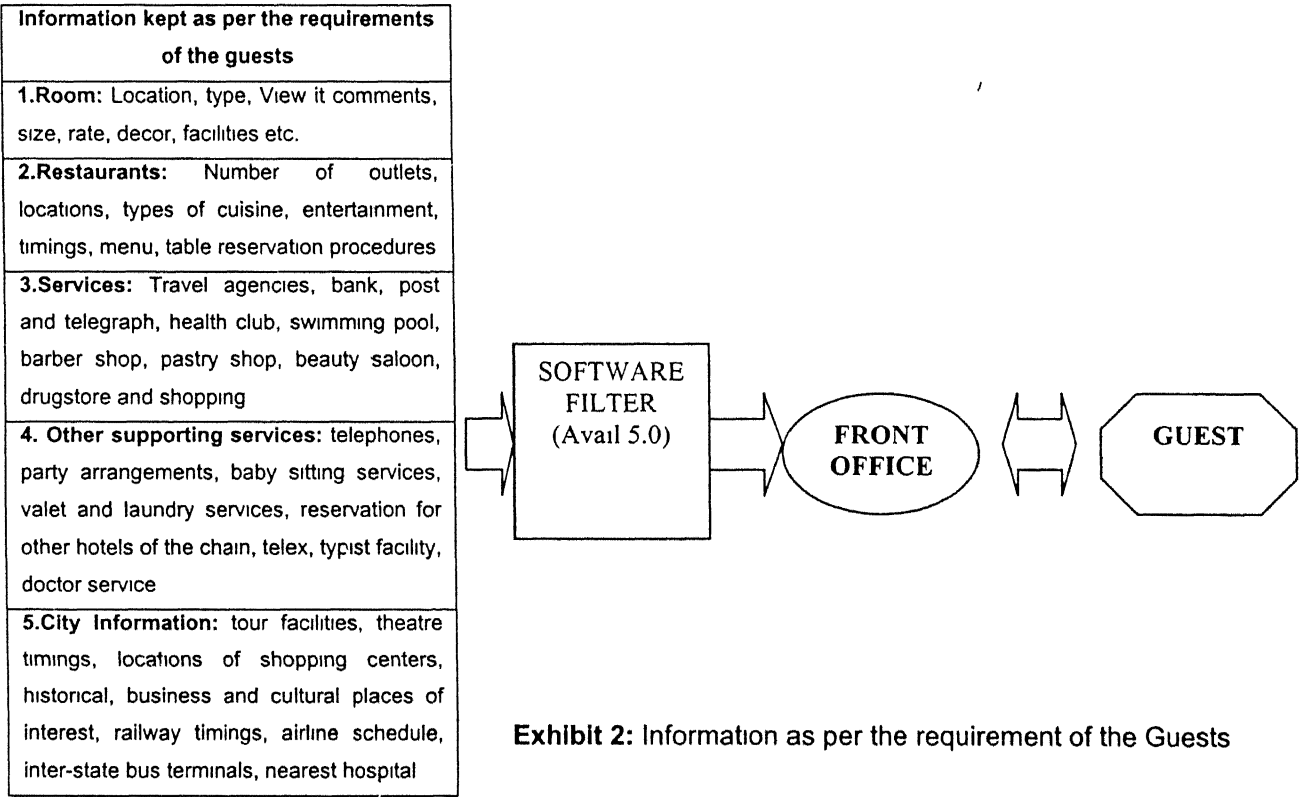
- 1. Information as per the requirement of the Guests at the Front office
- 2. Information for the internal operations of Taj

4.3.1 Information as per the requirement of the Guest:

The Exhibit below shows the kind of information kept under this category, which is generally required by the guest during his/her stay in the Taj. The information is filtered by the software package Avail 5.0 as per the queries of the guest. The Front Office assistant fills up the request query format displayed on the monitor as per the properties required by the guest. The software searches and then filters out the details of the properties and display the information on the screen.

Advantages of this package are at

- Sales promotion, and
- Meeting specific Guest needs



4.3.2 Managing information for the internal operations in Taj:

To manage the information at the front office various records are maintained and reports are prepared by the concerned persons as shown below in exhibit.3

Person	Reports, Records & Procedures prepared by him/her	Software package in use
Front Office Supervisor	a) Discrepancy Report	Feedalio 2.0
	b) Departure Intimation Control Sheet	--do--
	c) Night room report	--do--
Reservation Astd.	a) Group meal information Sheet	--do--
	b) Reservation Chart	--do--
	c) Guest history card	--do--
	d) VIP list	--do--
	e) Registration format	--do--
	f) Guest history card	--do--
Reception	a) Night Clerk's report	--do--
	b) Room Key Record	--do--
Front Office Cashier	a) Credit Card Charge Record	--do--
	b) Foreign Currency transaction Record	--do--
	c) Guest Folio	--do--
	d) Statement of bills Exceeding Limit	--do--
	e) Cashier report/ remittance of funds	--do--
	f) Summary of Charge record	--do--
Night Auditor	a) Night auditor Sales Recapitulation	--do--
Lobby	a) Lobby control Sheet	--do--
Telephones	a) Local, STD, ISD call voucher	--do--
	b) Guest Wakeup call list	--do--

Exhibit 3: Reports, Records and Procedures of the Front Office for the internal operations of Taj

All the reports mentioned in the second column of the above exhibit are stored in the central databank of the hotel. Various departments can access the data through various service terminals across the hotel premises. Any kind of modification or updating required is done by the concerned person (as mentioned in the first column) who is incharge of preparing the report. The databank is

protected by passwords so that unauthorized modifications cannot be done.

Following are the descriptions of each of the above reports.

Discrepancy Report:

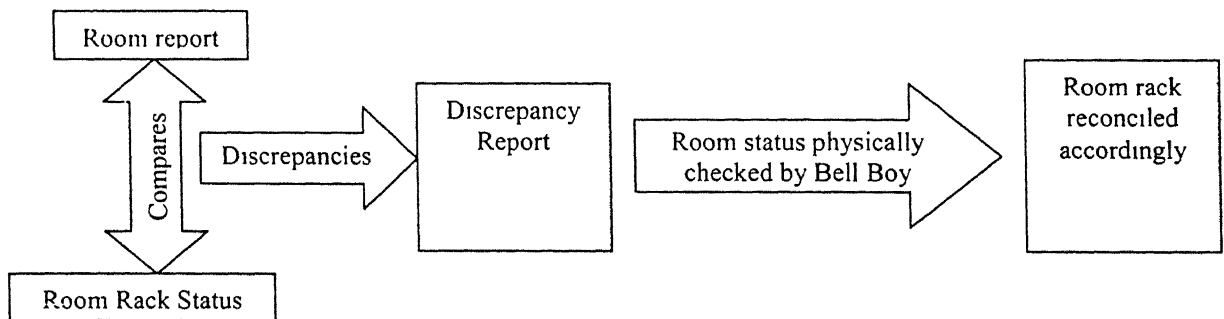


Exhibit 4: Procedure for preparing the discrepancy report

Front office supervisor on receiving the room report from the housekeeping prepares a discrepancy report. Any kind of Discrepancy noted between room rack and housekeeping room report is displayed on the monitor. These discrepancies are saved in a separate file called “discrepancy report”. A hard copy of which is then handed over to a bell-boy for physical check and reporting back of the room under discrepancy. After a physical check of the room the bellboy notes down the correct status, which is accepted by the front office supervisor and the room rack record is reconciled accordingly.

Departure Intimation Control Sheet:

When a guest checks out, the front office has to immediately update the departure intimation control sheet by updating the “departure room status” column. The software immediately leaves a message for the housekeeping floor supervisor’s desk (which is the central point of information for housekeeping), to clean the room so that it is ready for sale again. Housekeeping in return after preparing the room for sale reports back to the front office desk by clicking on the “done” icon. This leaves a message on the Front Office desk about the status of

the room. The Front Office supervisor then updates the “saleable room status” column in the departure intimation control sheet.

In technical parlance when the front desk informs the house keeping desk about a check out room, it is referred to as giving a “departure room” to housekeeping and when house keeping informs the front office about rooms which are ready for sale, it is known as “cleared rooms”.

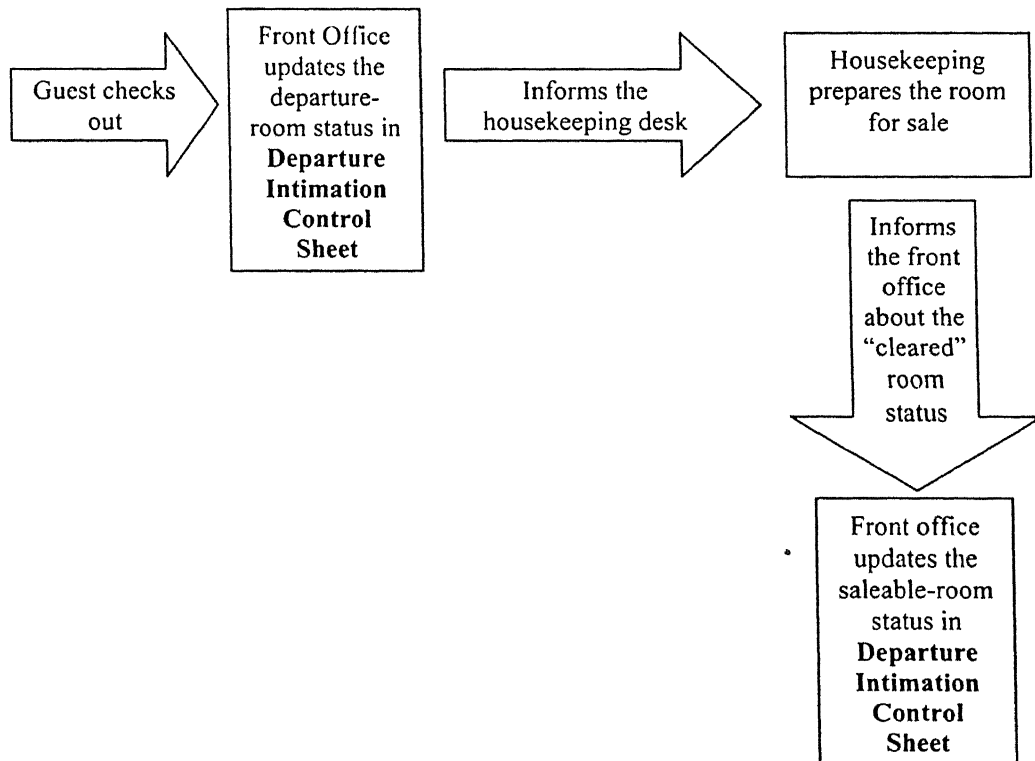


Exhibit 5: Procedure for preparing the departure intimation control sheet

Night room report:

After reconciling the “room rack” with the Housekeeping Room Report, the Front Office Reception Compile data on the “occupancy” position of the hotel for the day in the form of a report for the purpose of management information. This compilation and analysis of occupancy data is referred to as “night room report” and is invariably prepared by the night receptionist.

Group meal information Sheet:

A group is body of 15-40 persons or more. Due to its business importance the management has a policy to prepare the group meal information sheet before the group checks-in. This sheet is accessed by the kitchen, room service, housekeeping, accounts, lobby and the Front Office

Details recorded in this sheet are:

1. Booking needs
2. Room break up
3. Time of arrival and departure
4. Details of meals, venue and time

Reservation Chart:

A reservation chart is the basis of control of the reservation system. Each work sheet represents a month. The vertical columns represent each day of the month while the horizontal columns represents each room in the hotel. Each block created in the matrix then represents the room on a particular day of the month.

The types of colours used in each element of the chart matrix are as follows:

1. White – for individuals
2. Yellow – for groups and crews
3. Green- VIPs
4. Pink- through travel agents
5. Purple- conventions

Thus, if a particular guest requests for a single room on a particular day of the month, the corresponding blocks of any single room is coloured off.

Thus, a reservation assistant gets a pictorial view of the occupancy and booking in a particular month on the monitor.

Guest history card:

As the Hotel believes in improving its personalisation it maintains Guest History cards (worksheets) which enables it's services to know which guest is a regular client and therefore deserves a closer attention because of his

patronage. Often these cards (worksheets) list the guest's personal likes and dislikes (in the remarks column) so as to cater to them and make his stay a memorable one. Whenever a person checks in, the personal details are feed on the computer and the package searches for like matches in the guest history database. If matches are found then the concerned service facilities, which are availed by the guest during his previous visits, are informed about the guest.

Details recorded in this sheet are

- | | |
|--|-------------------------|
| 1. Personal details like name, status, business address, nationality, passport no, residential address, age etc. | |
| 2. Visit No | } On a particular visit |
| 3. Room No | |
| 4. Dates of Arrival and Departure | |
| 5. Billing | |
| 6. Facilities availed by the guest | |

Night Clerk's report:

Night clerk's report, which includes the calculations of:

1. Percentage of occupancy = $\frac{\text{number of rooms sold}}{\text{number of salable rooms}} \times 100$
2. Percentage of double occupancy = $\frac{(\text{house count} - \text{room occupied})}{\text{Number of rooms available}} \times 100$
3. House Count = (House count of previous day brought forward + Today's arrival – Today's departure)
4. Percentage of Indian occupancy = $\frac{\text{Indians in the house}}{\text{House count}} \times 100$
5. Percentage of foreign occupancy = $(100 - \text{percentage of local occupancy})$
6. Average room rate = $\frac{\text{Total room revenue}}{\text{Number of rooms sold}}$
7. Average room rate per person = $\frac{\text{Total room Revenue}}{\text{House Count}}$

VIP List

In this list the details of persons of business importance are recorded. The kind of information that goes in this list is the time of arrival, the room booked, duration of stay, the person responsible to provide amenities in the room service,

and the VIP preferences. Each VIP preferences are cross-checked through a search of all previous records, the software (Feedalio 5.0) highlights, on the monitor of the front desk, the earlier preferences of the VIP guest in his/her previous visits. This cross checking is done as the assistant prepares the preferences of the guest. These records are again being conveyed to the reservation channel for cross-checking if differences are found.

Credit Card Charge Record

The type of information stored in this are

1. Cardmember Acc No.
2. Cardmember name & approval code
3. Check or bill no.
4. Service establishment
5. Date of charge
6. Any delayed charges as listed below
 - a) Merchandise/service and type of delay
 - b) Taxes and Amt. Of delayed chg
 - c) Tips/ Misc. and Revised Total

Summary of Charge record

In this total of not more than 100 charge record forms are entered in the coloum Grand Total

Foreign currency encashment certificate:

Type of information recorded in this

- a) Date of encashment
- b) Guest name, passport number, nationality, room registration number, room number
- c) Traveler cheque no or currency note number
- d) Statement of the bank in case of travelers cheques
- e) Amount
- f) Type money
- g) Exchange rate etc.
- h) Grand total transaction by the guest

Record of foreign currency transacted

All foreign currency transactions are recorded in this report. Details recorded in this record are

- a. Date
- b. Name of the tenderer
- c. Nationality
- d. Passport no.
- e. Type of currency transacted (U.S dollars etc.)
- f. Rate of transaction
- g. Adjustments made towards settlement of bills for goods supplied/services rendered
- h. Balance amt. Paid (currency, amt.)
- i. Encashment certificate No. & date
- j. Remarks if any

Guest Folio

A guest folio is the master bill in which all cash and credit transactions are recorded for each resident guest. All credit bills from various revenue outlets such as restaurants, bars, laundry, telephones etc. gets automatically posted into the guest folio. A guest could check out at any time, bills pertaining to him / her must be presented upto the minute for recovery.

The guest folio has debit and a credit column. All charges are posted in the debit column. There are only four circumstances when there are postings in the credit column:

1. When a guest has payment towards his bill
2. When a guest has a deposit or advance
3. When a guest is given a discount by the management or is complimented with free service or facilities
4. When the cashier has overcharged and is required to make a correction.

Statement of bills exceeding limit

The software recalculates the grand total after every posting to the guest folio, if any of the guest folios exceeds the limit set by the management, the

software makes a statement of such folios and give messages to the front desk and accounts to get fresh deposits from the concerned guests.

Cashier report/ remittance of funds

Cashier of each revenue outlet has to prepare this report which includes the following details

- a) His name, department and revenue outlet, shift hour details
- b) Collections, disbursements, overage / shortage
- c) Net collections to remitted
- d) Column on imprest (at the end of shift) contain details of
 - i. Notes
 - ii. Coins
 - iii. Vouchers
 - iv. Exchange pending reimbursement
 - v. Total imprest
- e) Column on contents of the envelop contains details of
 - i. Notes
 - ii. Coins
 - iii. Total cash
 - iv. Foreign currency
 - v. Vouchers
 - vi. Cheques (as per reverse)
 - vii. Total amt enclosed
 - viii. Net collections as above
 - ix. Exchange pending reimburse

Front office cashier's report

The front office cashier prepares this report for a particular shift of the day.

The detail information stored in this are

- a) Cashier's name, shift timings,
- b) Date
- c) Received column
 - i. Bill number

- ii. Room departure
- iii. Room on account
- iv. Name of the guest
- v. Details of nationality
- vi. Currency transaction details
- vii. Exemption under clause no.

d) Paid Column

- i. Room no.
- ii. Name
- iii. City ledger paid outs
- iv. Others
- v. Paid out No.

Lobby control Sheet

In order to optimize the productivity of the team within a given shift the Lobby control sheet is used. The purpose of this sheet is to keep a record of and check on the movement of bellboys.

Information recorded on this sheet are

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • The captains name • Sheet no • Date • Shift timings | } | <p>On the top
of the
sheet</p> |
| <ul style="list-style-type: none"> • Room no • Attendant no • Arrival and departure • Room change to • Service call • Service call time details • Comments if any | } | <p>Recorded
column wise</p> |

The bellboys are given code numbers or attendant numbers to easily record their activities. Through this sheet the work load per boy is ascertained and the bell captain is able to distribute workload uniformly.

Guest Wakeup call sheet:

Wake-calls are those left by the guest who wishes to be called at a specified time, these calls are recorded on a guest wake call sheet. If a guest requests that the operator call him back later on the details are updated. The details that are recorded on the sheet are the name, room number, and the time, in proper time column.

4.4 Information Management at other Departments

Other departments like Housekeeping, Food & Beverages, maintenance etc maintain certain reports/records these are maintenance order, work order, weekly stores list, room linen control sheet, restaurant sales summary, room report and room status report.

Room status report is prepared by the floor supervisor/section supervisor in which details of the status of the room is recorded and this is summarized in the room report by the housekeeping executive. The software has features to calculate the room occupancy position for a particular room for any period of time in the past. It can also highlight for the management the rooms, which have a low occupancy status for a period.

4.5 Room Bookings & Travel Agencies

To sell its business facilities and rooms it uses the services offered by the following

- Taj Travel Professionals and its registered travel agencies
- Its own Central Reservation System
- Directly through travel agents

Taj differentiates its travel agents in three categories

- a) Local travel agents in which the hotel is located
- b) National travel agents
- c) Foreign travel agents

Further the categorization is as follows

- a) Registered with Taj Professionals
- b) Directly selling to Taj Lucknow

The travel agencies either registered with Taj Professionals or Taj Lucknow itself constitute the major portion of all room bookings (83.4% in the year 1999-2000 and 82.4 % in year 1998-1999).

The **central reservation system** constitutes around 3.1% in the last financial year (1999-2000) of all room sales as compared to 2.9 % the year before (1998-1999) for Taj Lucknow. And its booking rate shows an increase of 27% of overall increase in room sales for Taj Lucknow.

Case II: Hotel Parkroyal, New Delhi

5.1 Introduction

Parkroyal Hotels & Resorts are part of Bass Hotels & Resorts, regarded as one of the world's most global hotel company. Bass has five major brands - Inter-Continental, Crowne Plaza, Parkroyal, Holiday Inn and Centra - with 58 hotels and resorts throughout Australia, New Zealand and the South Pacific. Around the world Bass Hotels & Resorts owns, manages or franchises more than 2900 hotels in more than 95 countries.

Parkroyal New Delhi is a deluxe hotel, situated in the heart of South Delhi's business district, Nehru Place, within viewing distance of the beautiful Bahai Temple; the hotel offers a synthesis of style and grace. Due to its location, Parkroyal suits the business traveler.

5.1.1 Hotel facilities:

Parkroyal has 218 guest rooms and suites, a 22 metre swimming pool, Night Club, Health Club, Massage facilities, Sauna, Jacuzzi and steam room facilities, 9 hole putting green, Shopping arcade, Beauty parlour and barber shop, Secure undercover parking, Business Lounge, Business Centre. There are two meeting rooms, a ballroom, which can be divisible into three parts, three boardrooms, and the largest capacity is of 1000 people.

5.1.2 Guest Rooms of Parkroyal

Every guest room of Parkroyal feature individually controlled air-conditioning, ISD/IDD phones, colour TV, video movies and satellite channels, radio, desk, safes, minibar, laundry & dry cleaning service, hairdryer and 24 hour room service. The guest rooms are further categorized as per the services they offer Superior King/ Twin Room, Executive Suite, Deluxe Suite, Presidential Suite and Lutyens Club Room. Superior King/Twin Rooms, 137 in number, features a king size bed or two single beds and caters for up to two adults. Interconnecting twin rooms are also available. Executive Suites, 12 in number, are one-bedroom suites having a king size bed, separate lounge area and caters for two adults. Deluxe Suites have either one or two bedrooms with separate lounge and dining

area. Suite caters from two to four adults. Presidential Suite is at the rooftop with three bedrooms with large lounge and dining area, private balconies and rooftop garden, plus it is provided with twenty-four hour butler service. Lutyens Club Rooms, 60 in number, have either a king size bed or two single beds and have the best in comfort and hospitality that can be offered by the hotel. Extra facilities provided under this category include a continental breakfast at the Lutyens Club Lounge, tea and coffee during the day and evening drinks with appetizers

Other facilities available on request are babysitting, baby cots, rollaway bed available at Rs 800 per night. Persons 19 years and under sharing with parents in existing bedding are free of charge. Beside this Facsimile machines, cellular phones and lap top computers can be provided on extra charges.

5.1.3 Dinning rooms and areas: Parkroyal has seven different bars and dinning areas. Blooms with a Southeast Asian cuisine and a seating capacity of 120 persons have a poolside view. It also offers Indian dishes and opens daily, 24 hrs a day. Empress Of China offers Chinese dishes. It has a sitting capacity for 122 persons. The restaurant also features a private dining room. Open daily, from 12pm to 3.00pm and from 7.00pm to 12.00am. Dehlvi decorated with traditional Indo Islamic artifacts specialises in Nawabi and Mughlai cuisine with a sitting capacity for 68 persons. It has an open display kitchen. Open daily from 12 pm to 3.00pm and from 7.00pm to 12.00am. Tea Lounge opens daily from 10.00 am to 8.00 pm with views of the lobby, the poolside and lawns. It also has a high domed Rajasthan style ceiling, especially designed for the afternoon session. Besides India's most exotic blends of teas it also offers a rich selection of confectionary. It has a sitting capacity of 45 people. Lounge and Bar offers the finest selection of cocktails, wines and spirits with a seating capacity of 75. Open daily from 4.00pm to 1.00am.

5.2 Central Reservation System Overview

Being a part of the brand Parkroyal under the Bass group of Hotels and Resorts, all kinds of information management at Parkroyal New Delhi is done through the central reservation system. This system manages the database of the entire Bass group.

Major Modules of Central Reservations System:

- Reservation - Individual and Groups
- Scheduled or Immediate Transmission of Reservations to the properties*
- Market Reporting & Guest History
- Travel Agent Commission
- Departure Information from hotels for Guest History Update
- Track availability of rooms inventory by room type into the future
- Produce management reports such as Reservations Lists and Forecasts

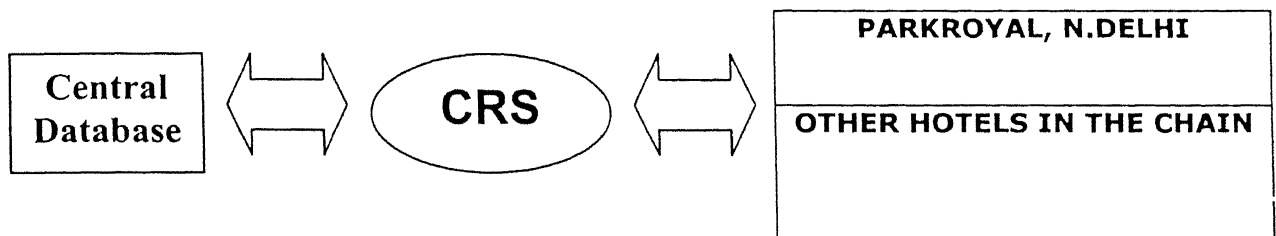


Exhibit 1: Central Reservation System

The Central Reservations System makes the entire reservation process centralized. It maintains a central database in which detail room status is being kept of every individual hotel of the group. Customers who want to make reservation to any hotel directly without any intermediaries, i.e. travel agents, can avail the online search available in their website. This searches properties in the Central Reservation System database. The customer can bring up a property based on key words e.g. swimming pool, room tariff details, etc., thus narrowing the search for a property that best fits his/her needs.

Hotels in the group fitting the search criteria that have availability for the requested dates will be displayed on the screen. Hotels in the group without availability will also be displayed, however they will be "dimmed out" to differentiate them from the available hotels. This will enable the customer to select the hotel in the group that may be a better fit, on alternative dates.

Details about the reservations made at individual hotels of the group like Parkroyal New Delhi, directly through their front desk or through their

* Properties in this case means the facilities of the hotels and resorts that are offered by Bass Group which can be reserved by an individual or group from anywhere

travel agents, are feed into the CRS database by the front office assistant of the hotel.

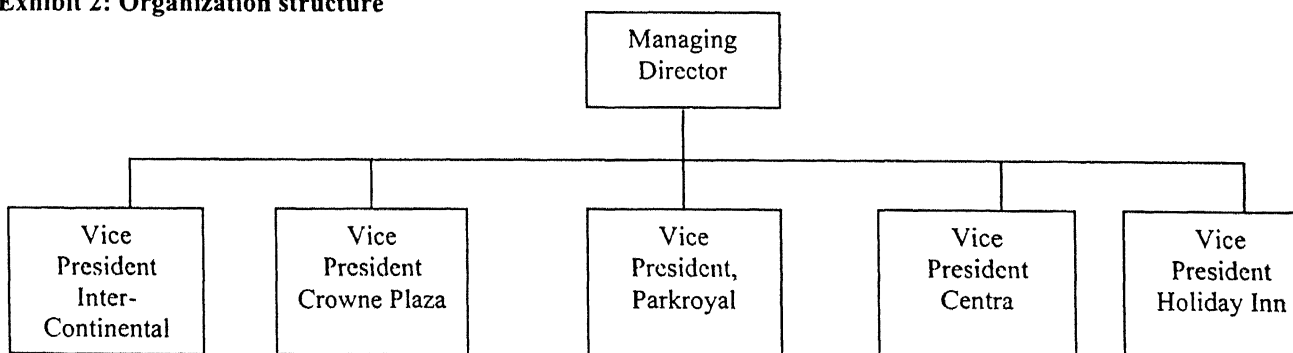
Every time the guest leaves the hotel his/her history card is updated. Guest History Data for each hotel is stored on the Central Reservation System. The past stay information on each guest is updated at the time of the last departure. When a Repeat Guest wants to return to the same property, or another property maintained on the CRS, the past stay information is kept on line on the CRS and easily accessed. This allows all sister hotels in the group, such as the parkroyal, to access this data and better their guest service.

Beside this the Central Reservations System has a fully integrated management package backed by a full service and support program. The system provides the Central Reservation Office the ability to give better guest service while achieving increased operational and management control and efficiency of the reservations operations.

5.3 Organization Structure

The Managing Director heads the entire Bass Group; and a vice-president heads each brand, like Parkroyal, Centra, Holiday Inn etc. The general manager of a particular hotel unit, like Parkroyal New Delhi, reports to the Vice President of the Brand to which the hotel belongs. Under the General Manager there are various divisions headed by a manager as shown in the exhibit 3x4 .

Exhibit 2: Organization structure



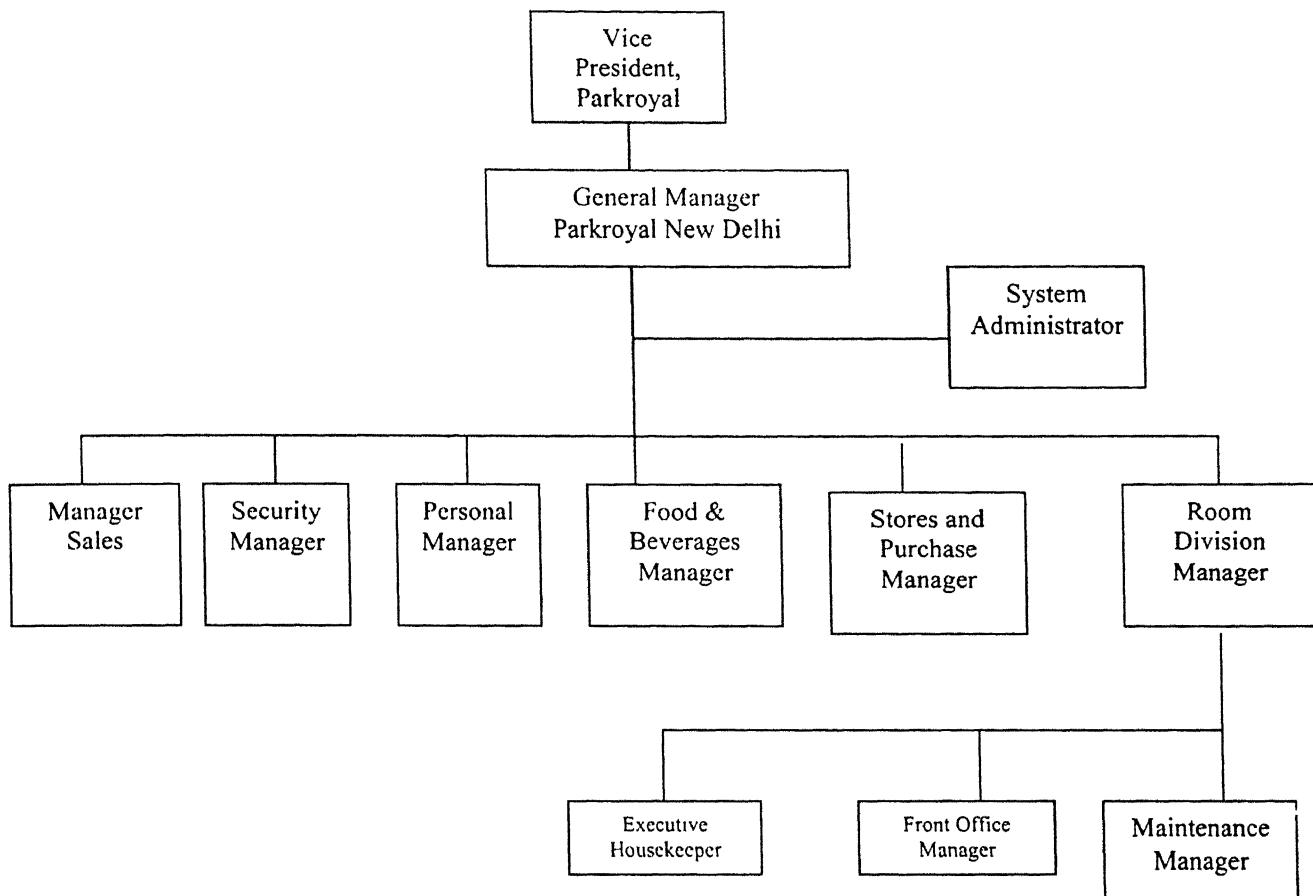


Exhibit 3: Structure of Parkroyal Room Division

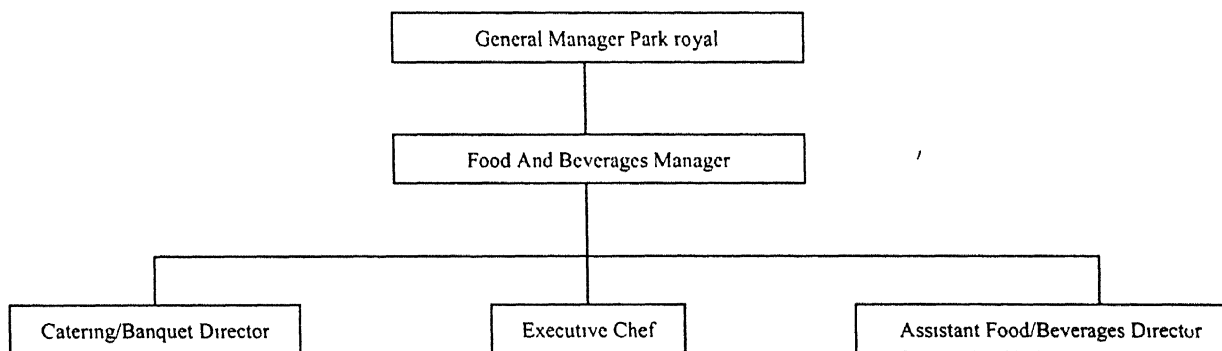


Exhibit 4: Structure of Food and Beverages

5.4 Operations:

The hotel operations are mainly divided into Front office, housekeeping and food & beverages.

5.4.1 Housekeeping Dept:

The housekeeping department maintains various kinds of records and reports essential for its day-to-day operations, the details of which are discussed below.

Reports, Records & Procedures prepared	Software package in use
a) Maintenance order	Hotelier 2.0 (developed by ITC)
b) Work Order	--do—
c) Room Report	--do—
d) Occupancy status Report	--do—
e) Weekly Stores list	--do—
f) Room Linen Control Sheet	--do--

Exhibit 3: Type of Reports and Records maintained in housekeeping dept.

Maintenance Order and Work Order:

As the housekeeping has contact with all rooms and public areas practically in every shift, it is they who detect, report and ensure the completion of all maintenance work. The moment a housekeeping member detects a maintenance requirement he/she logs the complaint at the Housekeeping Desk. The desk attendant feeds the nature and details of the complaint in the Maintenance Order. The system sends the maintenance order at the Eng and Maintenance Control Desk, which takes the print out in a form called the “work order”. This work order gets classified before the printout as per the concerned mechanic i.e. carpenter, plumber, electrician etc. After the repairs the room attendant gives his/her acknowledgement and keeps one copy for the housekeeping desk and the mechanic retains the other copy for the Eng & Maintenance desk. The control desks then make their respective entries.

Room Report

The housekeeping desk supervisor prepares this report after receiving the room status report of each floor from the floor supervisor. This report is sent to the front office for preparing the discrepancy report. The room report is basically a list of room numbers against which the housekeeping supervisor indicates, by prescribed codes the status of a particular room.

Exhibit 4: Codes for Room Status

Codes	Status
O	Occupied
V	Vacant
DND	"Do not disturb" sign on
L	Luggage in room but bed unused
UR	Under repair
N	Occupied but no luggage
SB	Scanty baggage
OOO	Out of order
DL	Double lock
NC	Not closed through departure has taken place

Hotelier has features to calculate the status for any particular room for a period of time in the past; also it can highlight for the management the rooms, which had a low occupancy status for a period.

Weekly Stores List:

In Parkroyal each floor has a store, which maintains inventory of articles of consumptions for every guest room on the floor. This sheet is used for controlling the supplies in the guest rooms. It is updated every week by the floor supervisor to give further purchase order to the stores and purchasing department. This sheet has four columns

- a) Items
- b) Consumed

- c) Req.
- d) Received

The items column is fixed and not usually changed. The rest of the columns are password protected so that unauthorized changes cannot be made

Room Linen Control Sheet:

This worksheet consists of five columns

- a) articles
- b) sent by floor
- c) received by laundry
- d) sent to floor
- e) Balance

The articles column is fixed and no changes can be made to it. The other four columns are protected by passwords so that unauthorized tempering cannot be done. Soiled linen is sorted according to types, counted and entered in the “sent by floor” column by the floor supervisor who only has the access to column. The laundry supervisor on receiving the soiled linen makes entry in “received by laundry “ column and sends back fresh linen by making entries into the “sent to floor” column she only has the access to these two columns. The floor supervisor then enters any balances after physically counting the fresh linen in the last column.

Note: The food and beverages linen exchange control sheet follows similar procedures.

5.4.2 Accounting

Reports, Records & Procedures prepared	Software package in use
a) Daily sales recapitulation	Hotelier 2.0 (developed by ITC)
b) Restaurant sales summary	--do--
c) Statement of bills exceeding limit	--do--

Exhibit 5: Types of reports and records maintained in the accounts department

- c) Req.
- d) Received

The items column is fixed and not usually changed. The rest of the columns are password protected so that unauthorized changes cannot be made.

Room Linen Control Sheet:

This worksheet consists of five columns

- a) articles
- b) sent by floor
- c) received by laundry
- d) sent to floor
- e) Balance

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5.4.2 Accounting

Reports, Records & Procedures prepared	Software package in use
a) Daily sales recapitulation	Hotelier 2.0 (developed by ITC)
b) Restaurant sales summary	
c) Statement of bills exceeding limit	

Exhibit 5: Types of reports and records maintained in the accounts department

Daily sales recapitulation

Daily sales recapitulation or tabular ledger is a record of all previous days transactions transcribed from the various sales documents into a single report. A revenue day for Parkroyal extends from midnight to midnight: thus the transcript is prepared after midnight for the previous day when all sales Summaries have been turned from all revenue outlets.

A process that precedes preparing this final document is to tally the cash and credit sales of each revenue outlet of the hotel with those recorded with the front office cashier. If they do not tally it is the duty of the night auditor to locate the error. The basic formula to prove a transcript ultimately

$$\left\{ \begin{array}{c} \text{Balance} \\ \text{brought} \\ \text{forward} \end{array} \right\} + \left\{ \begin{array}{c} \text{Today's} \\ \text{charges} \end{array} \right\} = \left\{ \begin{array}{c} \text{Balance} \\ \text{carried} \\ \text{forward} \end{array} \right\} + \left\{ \begin{array}{c} \text{Today's} \\ \text{credits} \end{array} \right\}$$

5.4.3 Front Office

Reports, Records & Procedures prepared	Software package in use
<ul style="list-style-type: none">a) Reservation Chartb) VIP Listc) Registration Formatd) Guest Folioe) Group Meal Information Sheetf) Statement of Bills exceeding limitg) Guest History Card	Hotelier 2.0

Exhibit 6: Types of reports and records maintained in the Front Office

Some of the above reports are discussed below **Reservation chart** is an on-line reservation grid in which the rows represent rooms and the columns days, each month has a separate chart. For the rooms, which are booked, the software has features which records and highlights the channels of reservation. **VIP List** is the list of important guests of the hotel; this is prepared beforehand and has personal information of the guest and also their preferences. **Guest Folio** is the

bill that is finally presented to the guest; the system automatically posts all the bills from the revenue outlets to the folio. **Group meal information sheet** is prepared beforehand before a group checks in; the system routinely highlights this sheet at the desks of room service manager and the executive chef.

5.5 Marketing

Parkroyal maintains its own database and has its own CRS system. Every time a guest checks out a guest history card is made in his name and updated after each visits. For past six years Parkroyal has collected important guest data concerning preferences, buying patterns, and transaction history and stored this data in detailed guest profiles, commonly referred to as guest history. Details of which is already being discussed under the CRS Overview. Despite this richness in guest history, the management feels that they are ill equipped to use this information to their marketing advantage.

The management wants to identify patterns, relationships, and market segments. They feel that their CRS and guest history system cannot adequately provide this functionality and is therefore unfit in serving the segment of one marketing strategies. To outcome this, new software tools in the market is being identified like **Firefly, Broad Vision, and Jango**. A decision to buy any one of these is pertaining with the top management for quite sometime. What they feel is with around 15 business hotels in Delhi competing for the same business segment the top management may likely take a decision in buying one of these tools.

Reservations of rooms, banquet halls, meeting or conference rooms can be done through the following

- i) Through their CRS which is accessible through internet
- ii) On-line reservations through its travel agent's websites
- iii) Directly through its front office
- iv) Various tour packages offered by travel agencies or otherwise

Internet bookings for the current year 1999-2000 through CRS is mere ₹ 1.5 % of all room sales, also booking through travel agencies website is 0.5 %

of all bookings at Parkroyal. As compared to last year Internet bookings has shown a substantial increase of ~~2~~7.8%.

Chapter 6

Case III: Hotel Clarks Avadh, Lucknow

6.1 Introduction

Hotel Clarks Avadh is a business hotel in Lucknow. It is part of the Clarks Group of Hotels, promoted by a business family in North India. The Group is a combination of following Business Hotels and Holiday Resorts, which use the International brand name of Clarks

Business Hotels

- Hotel Clarks Amer, Jaipur
- Hotel Clarks Avadh, Lucknow

Luxury Hotels

- Hotel Clarks Shiraz, Agra
- Hotel Clarks Khajuraho, Khajuraho

6.1.1 Clarks Avadh

Located in the City of Nawabs, Hotel Clarks Avadh specializes in the Nawabi Kitchen with its Avadhi cuisine at its three restaurants – Falknuma, Kabab Barbeque and Gulfam 24 hr coffee shop. Its 100 rooms are categorized as Standard Rooms, Deluxe Rooms and Executive Suites; and it has Business and Conference Facilities, Bank, Bars, Secretarial Services, Beauty Parlour, and a Shopping Arcade. It also has a health club and Internet access point in every room.

Conference Facilities: Being a business Hotel, Clarks Avadh has a strong emphasis on conferences. It has the following special features

- Sitting arrangements is done as per the specifications of the customer (U-Shaped, Theatre Style. Class-Room Style, Board Room Style, Rectangular etc)

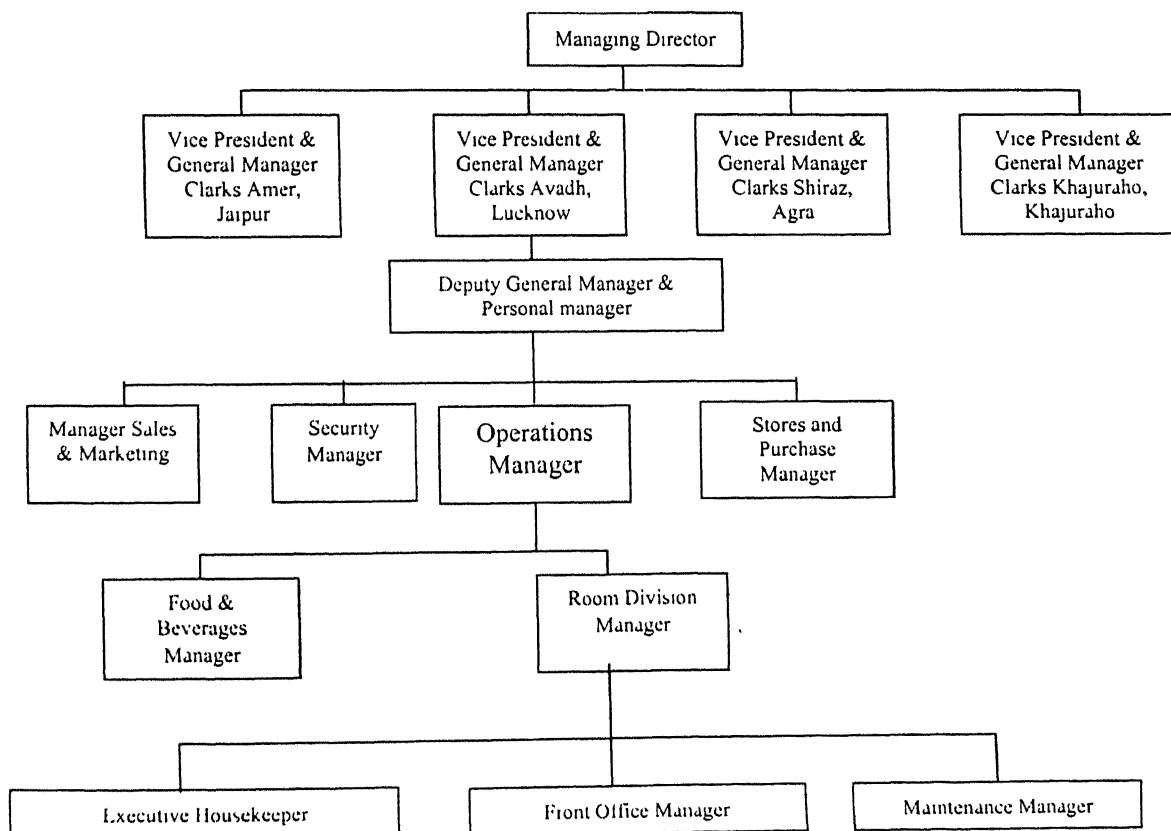
- Business and Secretarial Facility offers an exclusively appointed meeting manager who takes care of personal needs, during and after the conferences.
- Photocopy, Fax, Telephone, Internet Connection, Projection system, State-of-art Audio Visual Facilities
- Wide choice of Butter and Banquet menu, back-up services

Exhibit 1: Arrangements and Capacities of Conference Venues

Venue	Theatre Style	U-Shaped
Aiwan-e-Avadh (I)	70	60
Aiwan-e-Avadh (II)	60	45
Aiwan-e-Avadh (I&II)	175	105
Nishat	20	12
Mahtab	50	30
Anarkali	30	25
Aftab Manzil	60	50
Lawn (Standing Capacity)	1,500	

6.2 Organization Structure

Exhibit 2: Organization structure of Clarks Avadh



6.3 Information Management at Clarks Avadh

Clarks Avadh maintains its own operational database, independent of the sister hotels of the Group. The only information that goes into a shared database is the room occupancy status. In the following paragraphs we will discuss how the hotel operates and the information managed in various stages of interaction between the guest and the services. The four stages of guest and the hotel services interaction are

- Before the arrival of the guest
- On Arrival of the Guest
- During the stay of the guest
- Departure of the guest

6.3.1 Before the arrival of the guest:

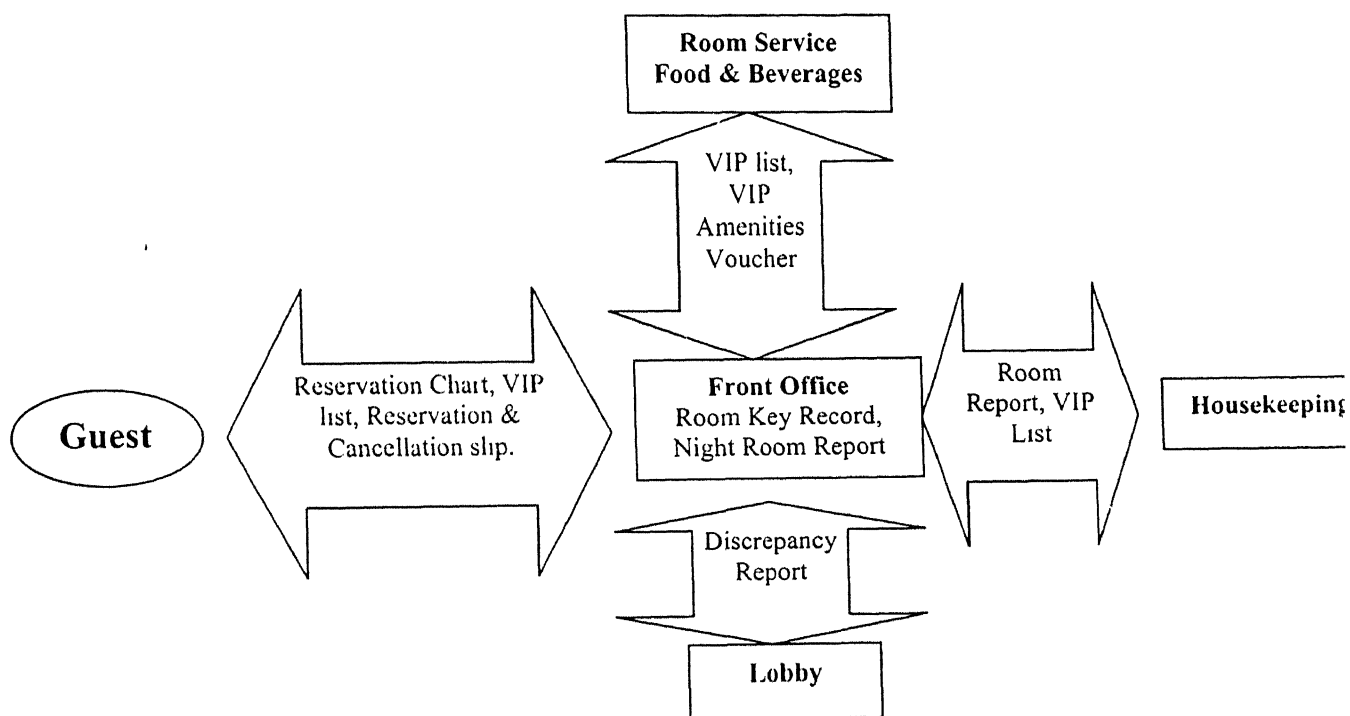


Exhibit 3: hotel's information management before the arrival of the guest

The above figure shows various departments of Clarks. The reports they prepare and the coordination they need to make these reports before the arrival of the guest. The Guest makes room reservation request to the Front Office desk either directly (in person, mail, phone etc.) or through intermediaries

(like travel agents). To verify the status of the room the reservation assistant takes the help of the **reservation chart**. The Chart is in form of worksheets where each worksheet is for a particular month. Each worksheet is matrix where each day of the month form a column and each room a row. The status of the room forms the element of the matrix, which is filled by different colours as per the room status (White – for individuals, Yellow – for groups and crews, Green- VIPs, Pink- through travel agents, Purple- conventions). These colour matrixes gives a pictorial view of the room reservation on the monitor to the reservation assistant.

Being a business hotel and situated in the capital city of U.P there are frequent group reservations made. The management of Clarks has a policy to differentiate between the groups as VIP and others as per its own business interests. The front office supervisor before hand prepares a **VIP list**. The details, which are kept in it, include the room booked, the time of arrival, duration of stay, the person responsible to provide the amenities in the room service etc. A separate **Amenities list** is prepared for every VIP detailing the type of amenities to be provided as per the details provided by the marketing division. The two lists i.e. VIP list and the amenities list are accessed by the general manager, lobby manager, housekeeping, room service, telephone, and sales. These files are also accessed by the laundry supervisor; maintenance engineer etc. The front office supervisor at her office desk can do modifications to the list; all others can only read the file.

The housekeeping supervisor prepares **room report** after receiving the **room status reports** of each floor from the respective floor supervisors. In this report she gives details of each room occupancy status in a set of codes. These codes are industry standards, which are followed by most of the hotels in India (O- Occupied, V- vacant, DND- “do not disturb” sign, L- luggage in room but bed unused, UR under repair, N- occupied but no luggage, SB scanty baggage, OOO- out of order, DL- double lock, NC- not closed though departure has taken place). This report is then accessed by front office desk after every shift.

The front office supervisor then prepares the **discrepancy report** by reconciling the room rack with the room report. All discrepancies between the room rack and the room report are stored in this report. The lobby manager is then given the responsibility to physically check the room and note down the correct status. After the lobby manager verifies the room status with the help of bell boys he gives the correct status of the room to the front desk. The front desk assistant then arranges the room rack accordingly.

6.3.2 On the arrival of the guest:

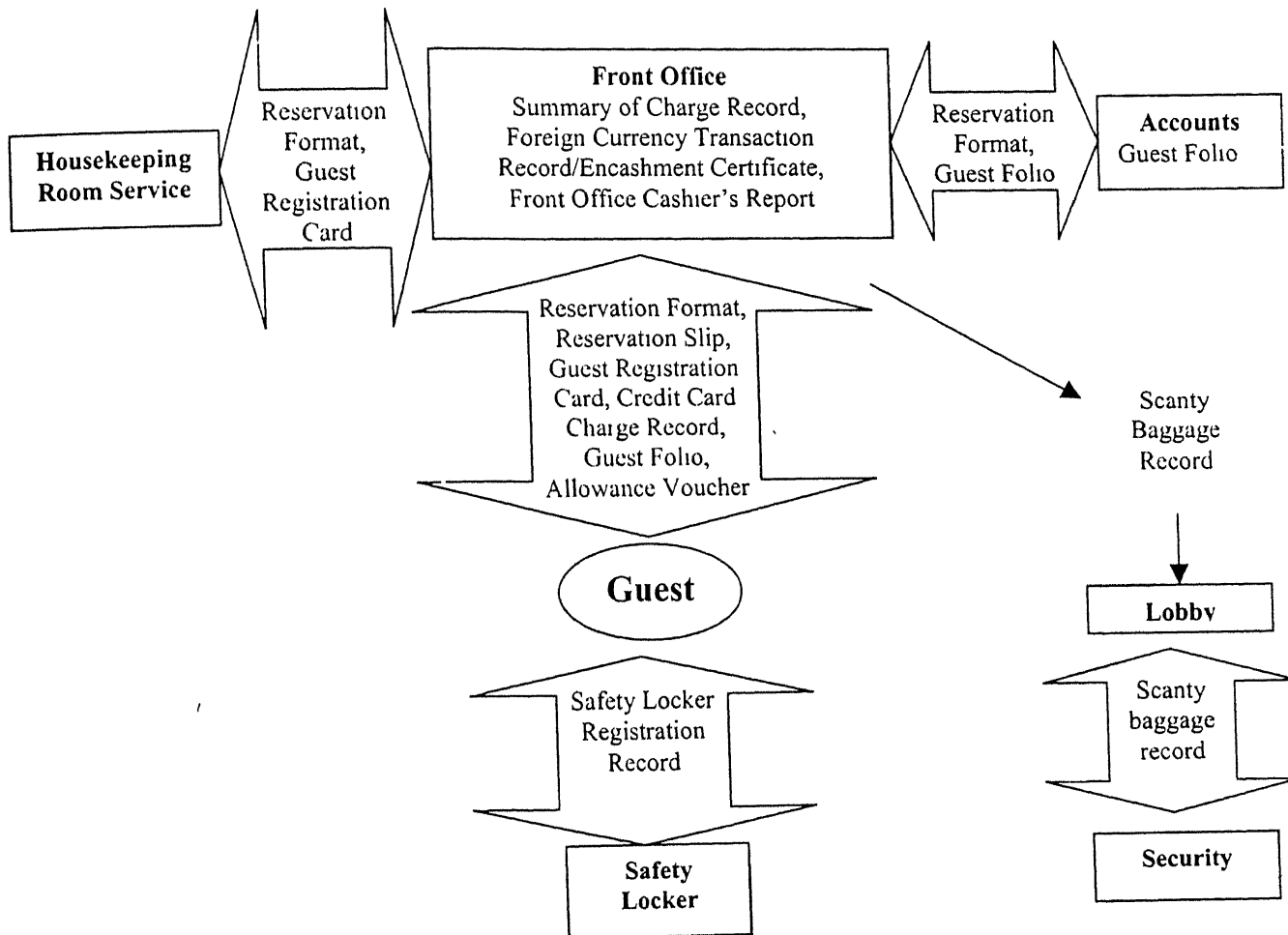


Exhibit 4: Hotel's information management on the arrival of the guest

When the guest arrives, the receptionist at the front office fills up the **reservation format**. The details, which are kept in this, are the name of the guest address, date and time of arrival, flight details, type of accommodation and rate, allowances if any, remarks, billing instructions etc. A **reservation slip** is

printed out for the guest at this time. Registration of the guest is done through the **guest registration card**. The details, which are entered in this card, are the name, address, nationality, purpose of visit, duration of stay, passport details (in case of foreigners), of the guest. As per the government rules a guest must register himself/ herself in his/her own writing. Moreover it is also a source of information on the movements of foreigners in the country for the foreigners registration office. For market research activity other details also entered are the mode of travel, arrival from, next destination, reservation made through, name of the company and type of business for the business travellers. All these details are kept in **Guest registration record** and the hard copy is kept in the handwriting of the guest in form of guest registration card. A **credit card charge record** is opened in the name of the guest if he\she prefer to pay through credit card. Here all the card details, details of facilities availed against which payment is due; unit cost, quantity, amount, tips and misc. details are recorded. The total of not more than 100 charge record forms are entered in the **summary of charge records**.

At Clarks Avadh the front office cashier is the authorized person on the behalf of the management to receive foreign exchange. He keeps details of the foreign currency brought over by the guest in the **record of foreign currency transacted**. Basic information that are kept in this are the date, name of the tenderer, nationality, passport details, currency details, rate of exchange, rupee equivalent etc. beside this other information kept in the record are regarding the balance amount paid (currency & amount), encashment certificate no. & date and remarks if any. For every foreign currency transaction a **encashment certificate** is made in which details like the guest name passport number nationality registration number, date, room number, traveler cheque number or currency note number, name of the bank in case of traveler cheques, amount, type of currency, exchange rate, rupee equivalent etc. are kept. A hard copy is given to the guest as a certificate of the transaction.

A **guest folio**, which is a master bill, in which all cash and credit transactions are recorded for each resident guest. All credit bills from

various revenue outlets are received centrally. The accounts office opens this folio immediately after receiving the registration card of the guest from the front office.

Guests with scanty baggage are a credit risk. Hence the Clarks management maintains a policy that “ scanty baggage “ guests are identified either by the front office or the lobby or the security and suitably flagged in the **scanty baggage record**. The type of information filled in this are the date of arrival, name, room number, name of bell boy, time of notification, description of luggage, identification remarks if any etc.

6.3.3 During the stay of the guest:

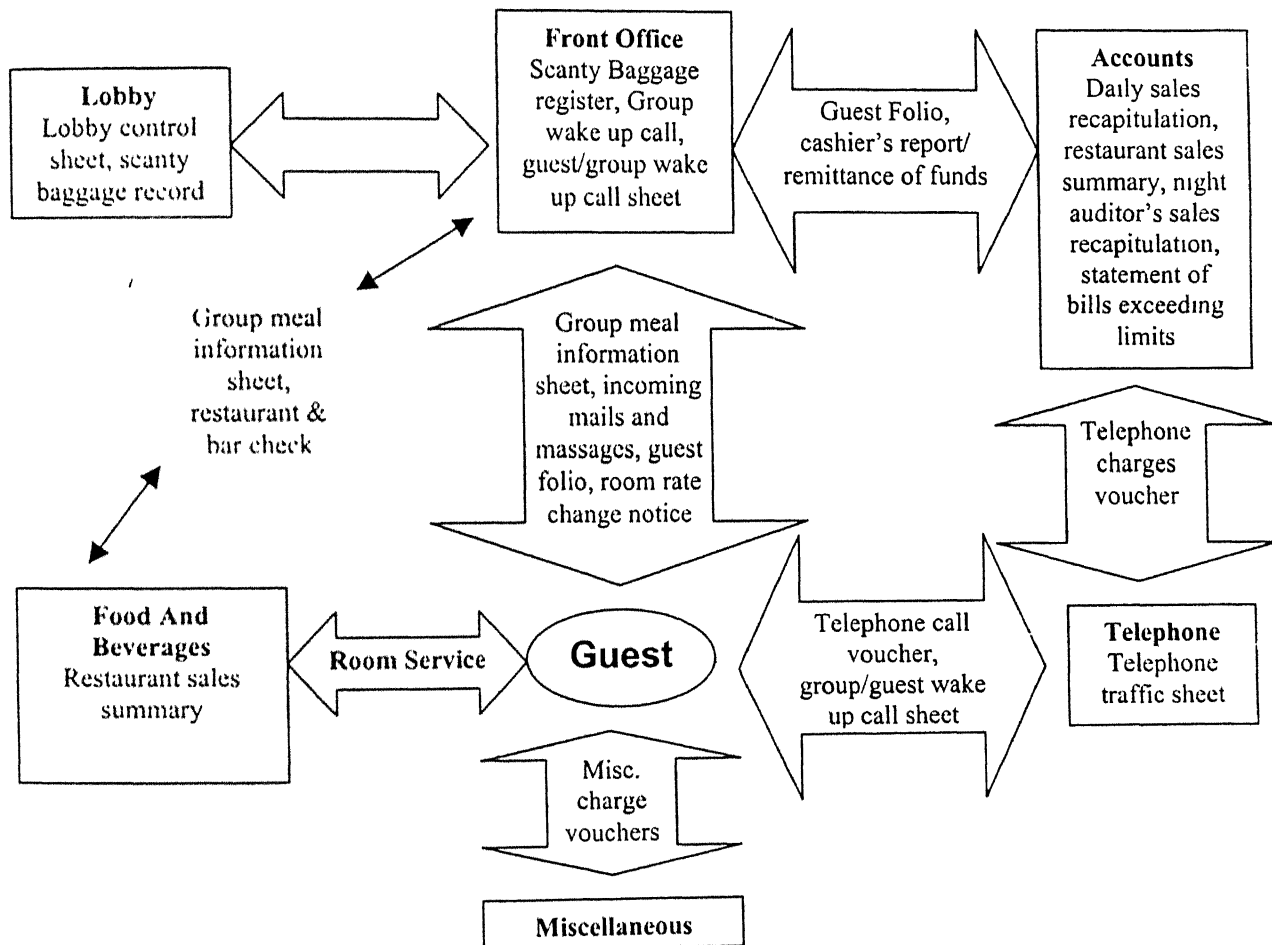


Exhibit 5: Hotels Information Management during the stay of the guest

The above figure shows various departments of Clarks in interaction with the guest and among themselves, the reports they prepare and the coordination

various revenue outlets are received centrally. The accounts office opens this folio immediately after receiving the registration card of the guest from the front office.

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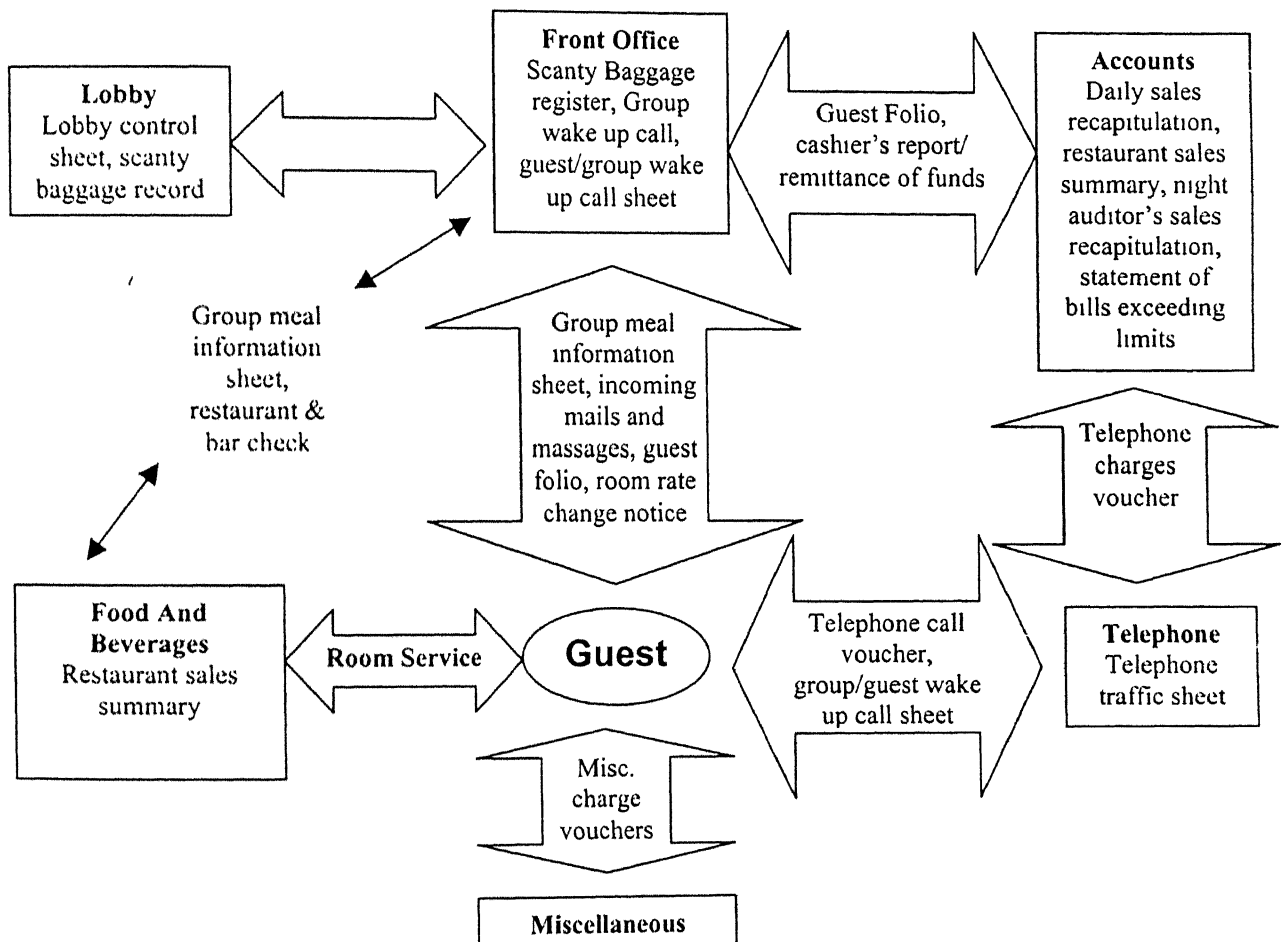


Exhibit 5: Hotels Information Management during the stay of the guest

The above figure shows various departments of Clarks in interaction with the guest and among themselves, the reports they prepare and the coordination

they need to make these reports during the stay of the guest in the hotel. The **group meal information sheet** is prepared to control the specific needs of the group during their stay in the hotel. Details recorded in this sheet are the booking needs, room break up time of arrival and departure, details of meals, venue, time etc. The kitchen, room service, housekeeping, accounts and the Front Office access this sheet. Beside the meal sheet another sheet that is prepared in case of groups called the **group wake up call sheet**, this sheet is accessed by the front office and the telephone dept. The details that is recorded in this sheet are name of the guest, room number, scheduled call time, pick up time, amendments if any etc. Similarly individual **guest wake up call sheet** is maintained by the telephone dept. The front office and the lobby also access this information. A **telephone traffic sheet** is maintained; in which details stored are the room number, extension number, name of the caller, to number, duration of call, P& T charge, service charge, etc. this sheet is accessed by the accounts dept to post the necessary charges to the guest folio. **Voucher** of every long distance call is sent to the room concerned and also to the accounts dept.

The accounts department prepares the **daily sales recapitulation record** or tabular ledger, which is a record of all previous days transactions transcribed from the various sales documents into a single report. A revenue day for the hotel extends from midnight to midnight: thus the transcript is prepared after midnight for the previous day when all sales Summaries have been turned from all revenue outlets. A **restaurant sales summary report** is prepared by the restaurant manager and submitted to the accounts. The night auditor prepares a **sales recapitulation report** of food and beverages sold through the room service to the residential guest and those ordered directly by the guest in the restaurants during his stay. Thus the total sales of the restaurant can be divided into the sales to the residential guest and others. Also posting to the guest folio can be cross-checked through this recapitulation. The night auditor also prepares a **statement of bills that exceed the limit** specified by the management. The guests are then asked to deposit an advance amount as per the policy of the management, which is deducted during the final payment at the time of

departure. The front desk gets messages after every shift to recollect from the guest a fresh deposit for bills (guest folios) exceeding limit.

Lobby control sheet is used by the bell captain to control and to optimize the productivity of the team of bell boys in a given shift. The purpose of this sheet is to keep a record of and check on the movements of bellboys. Information recorded on this sheet are the captain's name, date, shift timings room no, attendant no, arrival and departure, room change to, service call, service call time, details and comments if any. Through this sheet the workload per bell boy is ascertained and the bell captain is able to distribute the workload uniformly.

6.3.4 During and After the Departure of the Guest

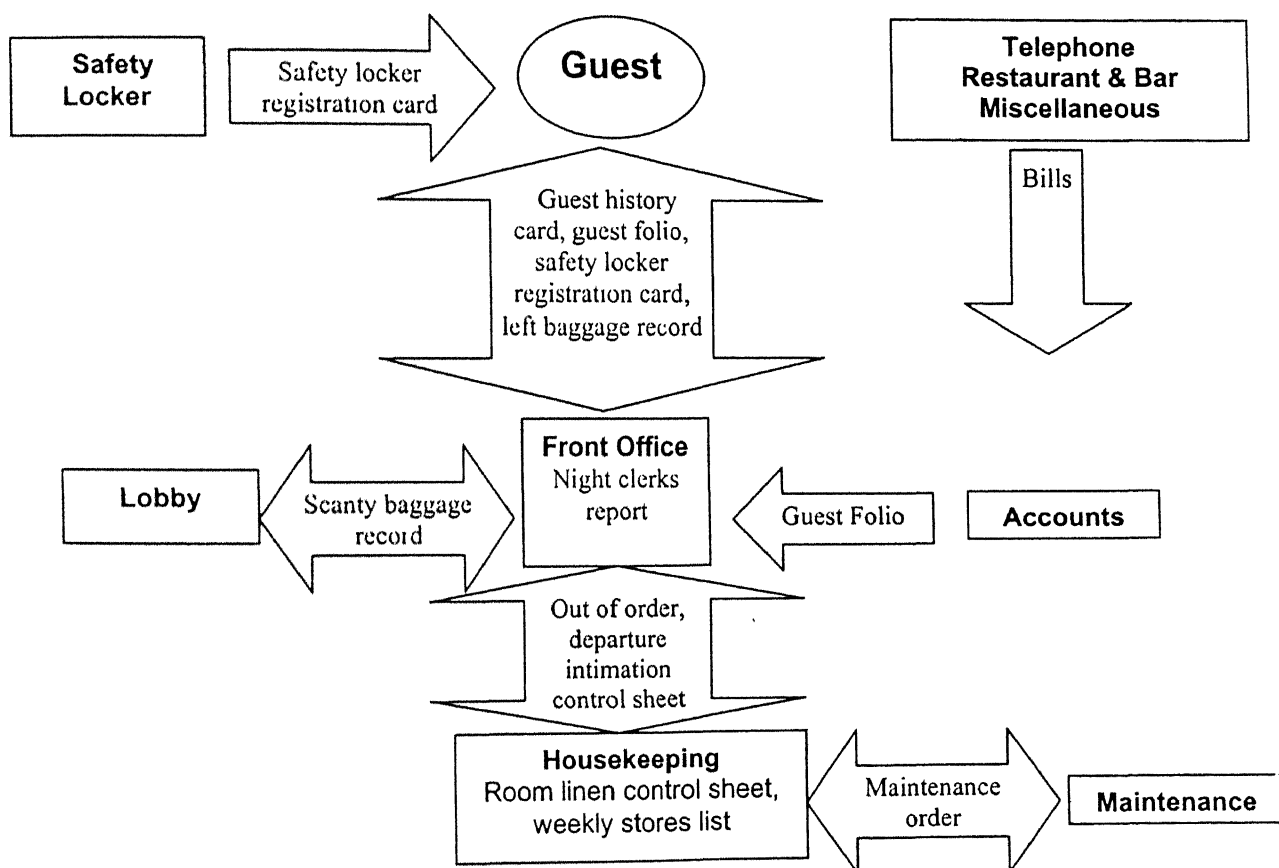


Exhibit 6: Hotel's information management during and after the departure of the guest

The above figure shows how the different departments at Clarks manage information at the point of departure and after the guest leaves the hotel room. When the guest informs the front office for his/her departure the front office

immediately updates its **departure intimation control sheet** by updating the "departure room status" column. The software immediately leaves a message for the housekeeping floor supervisor's desk (which is the central point of information for housekeeping), to clean the room so that it is ready for sale again. Housekeeping in return after preparing the room for sale reports back to the front office desk by clicking on the "done" icon. This leaves a message on the Front Office desk about the status of the room. The Front Office supervisor then updates the "saleable room status" column in the departure intimation control sheet. The **Guest history card** opened at the time of registration is updated for the present visit. In which personal details like name, status, business address, nationality, passport number, residential address, age which were recorded in earlier visits remain unchanged and other details like visit no, room no, dates of arrival and departure, billing etc are filled in the concerned columns. Also for every visit the hotel keeps record of all the sales transaction that the guest undergoes during his stay at the hotel. Minute details also get posted to the history cards.

The guest folio is closed and the bills posted in it are totaled and presented to the guest for final payment. Safety locker deposits are returned to the guest after the reproduction of the **Safety Locker Registration Card**. If the guest wants to leave some of the luggage so that he/she can collect it later; a separate record is maintained for this purpose called **the left luggage record**. Details entered in this are, the date and room number in which the guest was staying, the details of the luggage etc. The lobby manager, the security and front office updated the scanty baggage registered if the case is relevant.

After the departure of the guest the floor supervisor physically checks the room and housekeeping desk is intimated of any maintenance work required. The housekeeping desk issues **out of order** format to the maintenance department, which further issued **maintenance orders** to its mechanics. Further the soiled linen are collected and entries are entered into **the linen control sheet** detailing the type of linen, the room no etc. the soiled linen for each floor are physically counted and sorted as per the types and entered in the send by

floor column of the linen control sheet. The laundry manager on receiving the linen enters the received column and issued fresh linen against the spoiled one. If any shortage in supply of fresh linen is there the floor supervisor in the linen control sheet fills the balance column.

After the departure the night staff at the front office prepares **the night room report**. After reconciling the “room rack” with the Housekeeping Room Report, the Front Office Reception Compile data on the “occupancy” position of the hotel for the day in the form of a report for the purpose of management information. This compilation and analysis of occupancy data is referred to as “night room report” and is invariably prepared by the night receptionist.

Night clerk’s report, which includes the calculations of, percentage of occupancy, percentage of double occupancy, house count, percentage of Indian occupancy, percentage of foreign occupancy, average room rate, average room rate per person. This report prepared by the night clerk is for the management to view the occupancy position of the hotel at the end of a particular day.

6.4 Room Bookings:

Rooms and other facilities at Clarks can be booked through their website, or travel agents or directly at the front desk. Clarks Internet bookings for the year 1999-2000 constitute of 1% of all bookings but the number of Internet bookings has increased 22.8% over the previous year.

Chapter 7

ANALYSIS

In this chapter, the three cases discussed in the preceding chapters are being analysed. Through this analysis a comparative study is done on the role of information technology in the three hotels at various operational levels.

7.1 Differences in the extent of elaborateness of reporting

In the following paragraphs we will discuss the variations in the elaborateness of reporting in the three cases and the differences in the role of IT in managing these reports/ records with reference to the cases discussed in the previous chapters.

7.1.1 Reports/records with substantial differences

Only those reports/records, which have major differences in each of the three hotels, are discussed below.

Discrepancy Report¹

Taj & Clarks maintain this report and follow up with physical verification through bell-boy. Parkroyal does not maintain any such report. At Parkroyal the on-line room occupancy status as prepared by the floor supervisors and the room report prepared by the housekeeping desk is accepted as such by the front office without any physical verification.

Scanty Baggage record²

Taj and Parkroyal do not maintain any scanty baggage record like Clarks. Their management prefers to rely on advance payment and keep a strict vigil on the statement of bills exceeding limit.

¹ A discrepancy report is a front office flag on a particular room number, if front office finds that housekeeping has reported a different status (occupancy/ vacant/ out of order/ etc) than what front office has on its own records called "room rack".

² This is a record maintained, by the front office, security etc., about guests who can be potential credit risk for the hotel.

Left baggage record³

Only Parkroyal and Clarks offer the left baggage service so they maintain a record for this. Taj does not offer any such service.

7.1.2 Reports/records with minor differences

Only those reports/records, which have minor differences in each of the three hotels, are discussed below.

Reservation Chart

All the three hotels maintain similar information on this chart. In the case of Parkroyal besides the usual information it also records in codes the *channel of reservation*.

VIP list

There is no basic difference in the type of information being kept, except in the case of Taj, where each VIP's preferences are cross-checked through a search of all previous VIP records. If any similarity is found between names of the VIP guest and previous records the software package highlights, on the monitor of the front desk, the earlier preferences of the VIP guest in his/her previous visits. This cross checking is done by the system as the assistant prepares the preferences of the guest. These records are again being conveyed to the reservation channel for cross- checking if differences are found. The other two hotels also prepare the VIP list with the preferences but they do not have this cross-checking option in their system.

Room report & Room Status report⁴

Information kept in these reports are industry standards and there is no difference in the type of information being maintained in this report. Only in the cases of Taj & Parkroyal the software can calculate the room occupancy position for a particular room, for example the presidential suite, etc., for any period of time for in the past. It can also highlight for the management the rooms, which had a low occupancy status for a period. This room wise occupancy status can't

³ If the guest wants to leave some of the luggage so that he/she can collect it later, a separate record is maintained for this purpose called the left luggage record

be checked by the Clarks system, which can only highlights the occupancy position for the hotel as a whole through the night clerk's report. If one has to seek details then the room status reports of each floor for every particular shift/day has to be scanned. The Clarks system is not even helpful in this kind of scanning.

Registration Format

The kind of information maintained in this is quite similar in the three cases. In the Taj case as details are entered into the format by the receptionist the software cross checks these details with a search of previous records in guest history records, if any similarity is found it is highlighted on a separate window. Also she can get information about the various services availed by the guest in his/her previous visits. This information is then forwarded to the various services that were availed by the guest. This is done only after she confirms the identity of the guest. This instant recognition of the guest at the time of guest registration helps Taj to maintain a more personalised image before its customers. The other two hotels lack this filtering technique.

Guest Folio

The software packages of Parkroyal and Taj automatically post the bills to the guest folio; the front office cashier does not have to manually do the posting of each and every bill. But in case of Clarks every bill is stamped at the accounts section and then posted to the folio, the hard copy of each bill is also kept, and presented to the guest for verification at the time of final payment of the hotel bills.

Group meal information Sheet

The three hotels maintain similar information. Only in case of Parkroyal the software without any human intervention intimates the kitchen and the room service when the front desk prepares the final sheet. All such sheets are routinely highlighted at the desks of room service manager and the executive chef.

⁴ Each floor supervisor prepares a report of room status (vacant/ occupied/ under repair etc.); and all these are combined by the executive housekeeper in the room report.

Statement of bills exceeding limit

Each of the three hotels prepares this statement and the details in this statement are quite similar. As mentioned earlier the software helps the management of Parkroyal and Taj maintain a strict vigil over this record. After every posting made by the revenue outlets to the guest folio the software recalculates the grand total. In case the total exceeds the limit set by the management the front office desk gets an instant warning message from the system to recollect from the guest a fresh deposit. Clark's system only alerts the front office assistant after every shift.

Guest History card

There is some difference in the way the information is maintained in the guest history cards by the three hotels. Clarks record every sales transaction that the guest undergoes during his stay at the hotel; minute details are posted in the history cards. Such minute details numbers over hundreds of saleable products that the hotel offers to its customers from all its revenue outlets. In case of the other two hotels i.e. Taj and Parkroyal only those items that the hotel wants to promote rigorously and that are also availed by the guest during his/her stay are entered into the Guest history cards. On the other hand, Clarks' software can easily include changes in the saleable items and can also add new ones.

7.1.3. Reports/records with no differences

There are certain reports in the three cases where no differences could be identified. These are room key record, forecasting room reservation, foreign currency transaction record, summary of charge record, credit card charge record, cashier report/remittance of funds, night auditor's sales recapitulation, night clerk report, departure intimation control sheet, maintenance order, work order, weekly stores list, room linen control sheet, daily sales recapitulation, restaurant sales summary and lobby control sheet.

7.2 Data warehousing, sharing and filtering

In the three cases Taj, Parkroyal and Clarks, we have discussed how they are managing their data. In the following paragraphs we will discuss what kind of data the three hotels, within their organization and among the sister hotels of respective groups, are sharing. Also how the hotels are warehousing data and what kind of filtering tools are being used.

7.2.1 Sharing reservation status data

All the three hotel groups share their room reservation status with their sister hotels which help them in booking and furthering their sales. Each group's website has an on-line room reservation feature which can be availed by customers to verify rates, room availability and also book hotel rooms

7.2.2 Sharing customer Data

All the three hotels (Parkroyal, Clarks and Taj) collect large volumes of guest data and store this data in **Guest history cards**. Parkroyal and Taj share all their guest data (customer data) with their sister hotels for market research. In case of Clarks Avadh this guest data is not shared among the sister hotels. For them the value of guest data is too important and too valuable to be placed in the hands of others. The management has a fear that this data may be used in the future by the third parties to steer one's loyal customer base to a competitor

7.2.3 Sharing Operational Data

The type of data collected and managed by the three hotels for their basic operations has already been discussed in detail. Also in the previous paragraphs we have discussed the differences in the extent of reporting these data. In the case of Parkroyal at its New Delhi unit, this information is not only accessed by various departments of the Hotel but also by sister hotels and the top management of the entire Bass Group through a sophisticated network. Taj also has its own central reservation system but the data shared between sister hotels

is only the room occupancy status data and the guest data but not the operational data of each individual hotel.

7.2.4 Data warehousing and filtering

As evident from the case, Parkroyal has been searching for new tools for data warehousing and data mining and some tools such as *Firefly*, *Broad Vision*, and *Jango* are already being identified. It can also be interpreted that its management is focusing on the development of its guest intelligence system through which it can seek, collect, and sort the right guest data, validate it, and then share this data throughout all levels of organization to create personalized, unique customer experiences. We have already discussed how Clarks have also been collecting guest data, updating its database after every customer interaction, and storing every guest hotel sales transaction into guest history card.

All information regarding hotel operations in Taj goes through the operations manager of the hotel unit, which leads to filtration of information from the operating floor. Clarks also has similar structure like Taj. Top management of Parkroyal on the other hand has the capability of bypassing middle management and directly accessing data from the operating floor, thus decreasing senior management's dependence on lower-level managers (who can hold or discard information) and allowing the former to closely monitor key operational decision.

7.3 Information service for the guest

In the Taj case we have seen how the front desk manages information as per the requirement of the guest. The guest demands immediacy and hassle-free service. In order to meet this more demanding environment front desk employees must be empowered and informed, systems must be smart, flexible, and easy to use, and they must provide the guest with opportunities to shop, book, and pay in a secure transaction environment. These problems are solved at Taj Lucknow by using a fast filtering tool (Avail 5.0) as shown in the Exhibit 3 of Chapter 4. This tool makes the system smarter and processing faster, information is readily

available to guests and employees, enabling faster delivery of services. A gist of the services and the types of information is given below.

1.Room: Location, type, View it commands, size, rate, decor, facilities etc

2.Restaurants: Number of outlets, locations, types of cuisine, entertainment, timings, menu, table reservation procedures

3.Services: Travel agencies, bank, post and telegraph, health club, swimming pool, barber shop, pastry shop, beauty saloon, drugstore and shopping

4. Other supporting services: telephones, party arrangements, baby sitting services, valet and laundry services, reservation for other hotels of the chain, telex, typist facility, doctor service

5.City Information: tour facilities, theatre timings, locations of shopping centers, historical, business and cultural places of interest, railway timings, airline schedule, inter-state bus terminals nearest hospital

If the guest likes to book for any of the services, he/she just have to pick up the phone and contact the front desk, the front desk assistant fills the query form, and the software filters the information and then make the transaction for the guest. For each of the services through this system for which Taj has to incur expenditure, the hotel charges an extra service charge and the whole billing is then posted to the guest folio. This kind of information facilities is also available by other hotels as well, what they lack is a filtering tool like Avail 5.0. Parkroyal and Clarks do the searching manually and maintain an on-line directory for the convenience of the front desk assistant. Problems that arise for these two hotels are not only in slow searching but also making frequent changes to the data.

7.4 Influence of IT on sales

The following discussion shows how the role of intermediaries i.e. travel agents is being eliminated by Internet. Also it is redefining the relationship between the hotels & travel agents. The exhibit below shows the channels of reservation at the three hotels and also their share in the total bookings made at these hotels. The exhibit also shows the growth rate of Internet bookings in each hotel.

Exhibit 1: Hotel bookings

Channels of booking (1999-2000)	Taj Lucknow	Parkroyal, N.Delhi	Clarks Avadh
Travel agents	83.4 %	91.5 %	96 %
Through the website of the hotel in its CRS	3.1 %	1.5 %	1 %
Other means	14.5 %	7 %	3%
Growth of Internet bookings over the previous year	27 %	27.8 %	22.8 %

At present the hotels rely heavily on the travel agents and other intermediaries for room bookings. But the way internet bookings are growing, in near future, there may be less reliance on intermediaries as the internet tools become easier, faster, and cheaper for consumers to use.

7.5 Decision making and the role of IT in it

In a service organization like hospitality, the employees are authorized at different levels of the organization to take decisions both at the operational level and also at the management level. In the following paragraphs we will discuss the role of IT in the routine and non-routine decisions taken by hotel employees.

7.5.1 Non-routine Decisions

In the Clark's case we have discussed the scanty baggage record. The decision to record guest details in this record, which is a non-routine affair, is taken up by the bell Captain at the lobby. Guest of Credit risk is recorded in this, which is maintained on-line, so that staff in the front office, lobby, security and housekeeping can share and remain cautious.

For performance appraisals, training which are not routine, the restaurant managers of Parkroyal have to keep knowledge about the staff, in various grade sheets like hygiene, service, knowledge about the restaurant, attitude, and

communication. These non-routine grade sheets in Parkroyal are maintained in the system and are used by the management for promotions and individual perks.

7.5.2 Routine Decisions

The lobby manager/ bell captain maintain lobby control sheet in all the three hotels. These sheets are used for optimizing the productivity of the bellboys. The executive housekeeper is the authorized person for supervision, training and recruitment of personnel also to maintain the inventory at various stores of the department, this requires a lot of data to be maintained and the system helps the housekeeping in this respect in all the three hotels.

For getting funds from the management the executive housekeeper in the hotels presents two type of budgets one is the operational budget and the other is the capital budget, and the system helps in maintaining the expenditure records and the status records of various articles that are mentioned in the budgets.

The restaurant manager is the authorized person for assignment of duties, performance appraisal, staff scheduling, tip distribution, training, attendance and staff briefing. For these routine matters in all the restaurants mentioned in the cases records are maintained in the hotel system.

7.6 Influence of IT on Marketing

Electronic presence is established by the three hotel companies on the web by creating their own website. The website of the Taj Group is a corporate website, as it gives basic information about its history, mission and philosophy, its corporate executives, brands & services, and locations. It also gives the current events in which the company (Indian hotel company) features, financial performance, job opportunities and training. The sites also have features to answer customer questions by e-mail. The marketing features of Taj website are the information on various brands and range of service products and the service rates. Also one can book rooms and check availability in a secure environment.

The website of Parkroyal is not a corporate website it is a marketing website. In this website one gets information on any of the hotel units of any of

the brands of the Bass group. The kind of information available is the type of services and products, the location, and rates of each hotel. Also like Taj, customer queries are entertained and rooms can be booked on the web. Clarks website is quite similar to the Parkroyal's, but it does not have features like newscasts and customer queries.

Chapter 8

Conclusion and Limitation

In the previous chapters we have studied the application of Information technology in different spheres of hotel operations and tried to analyse the effects of IT on hotels. In this chapter we will conclude the key effects of IT, which have emerged from the analysis.

8.1 Extent of reporting

Hotels maintain similar type of reports and only in case of few reports do the hotels differ. The hospitality industry's data requirements are well defined and also the record layouts for passing data between applications. The main differences are in the extent of use of IT in managing the reports.

8.2 Information Sharing and coordination

The data, which is maintained, is classified into operational data, customer data and services data. Shortcomings that emerged from the discussion is that the hotels do not share operational data with sister hotels like they do for customer data and services data. Some of the hotels do not even do that.

The extent of data sharing is more in bigger hotel chain as compare to smaller chains. This brings more uniformity to the services and procedures in hotels of bigger chains. On the other hand hotels of smaller chains lacks in uniformity of services and procedures.

The lack of sharing data by some of the smaller hotel groups is due to the fear of their data being used by third parties to steer their loyal customer base to a competitor.

At every stage of service to the guest - before arrival, on arrival, during stay and after departure – the various departments of the hotel have to coordinate for better services and IT helps to a large extent to make this coordination easier and faster.

8.3 Information Service and filtering tools

As the hotel tries to position itself as an extension of guest home, office and recreation center it has to maintain a lot of data for presenting itself to the guest at any instant. These require the fast software tools for instant recognition of the guest needs and delivering of services. Some of the hotels have been successful in implementing and some of them are still in the process of doing so.

8.4 Customer data

Most hotels seem ill-equipped to use the richness in guest history data to streamline processes, recognize guests, and customize their visits. Few Hotels are able to cross-check with previous customer history the consumer preferences from various channels through which the guest approaches the hotel services.

8.5 Decision-making

IT helps the hotel personnel in taking routine and non-routine decisions by making information available. Some of the hotels are successful in optimizing the productivity of their employees by using IT in supervision.

8.6 Marketing

Internet is a fast growing channel of room reservation. It could in future by pass the role of intermediaries. Hotels make on-line marketing through their own group websites. These websites are either corporate or marketing websites. The websites also focus on providing real time access to rates, availability, and service information.

8.7 A model of Effects of IT in Hotels

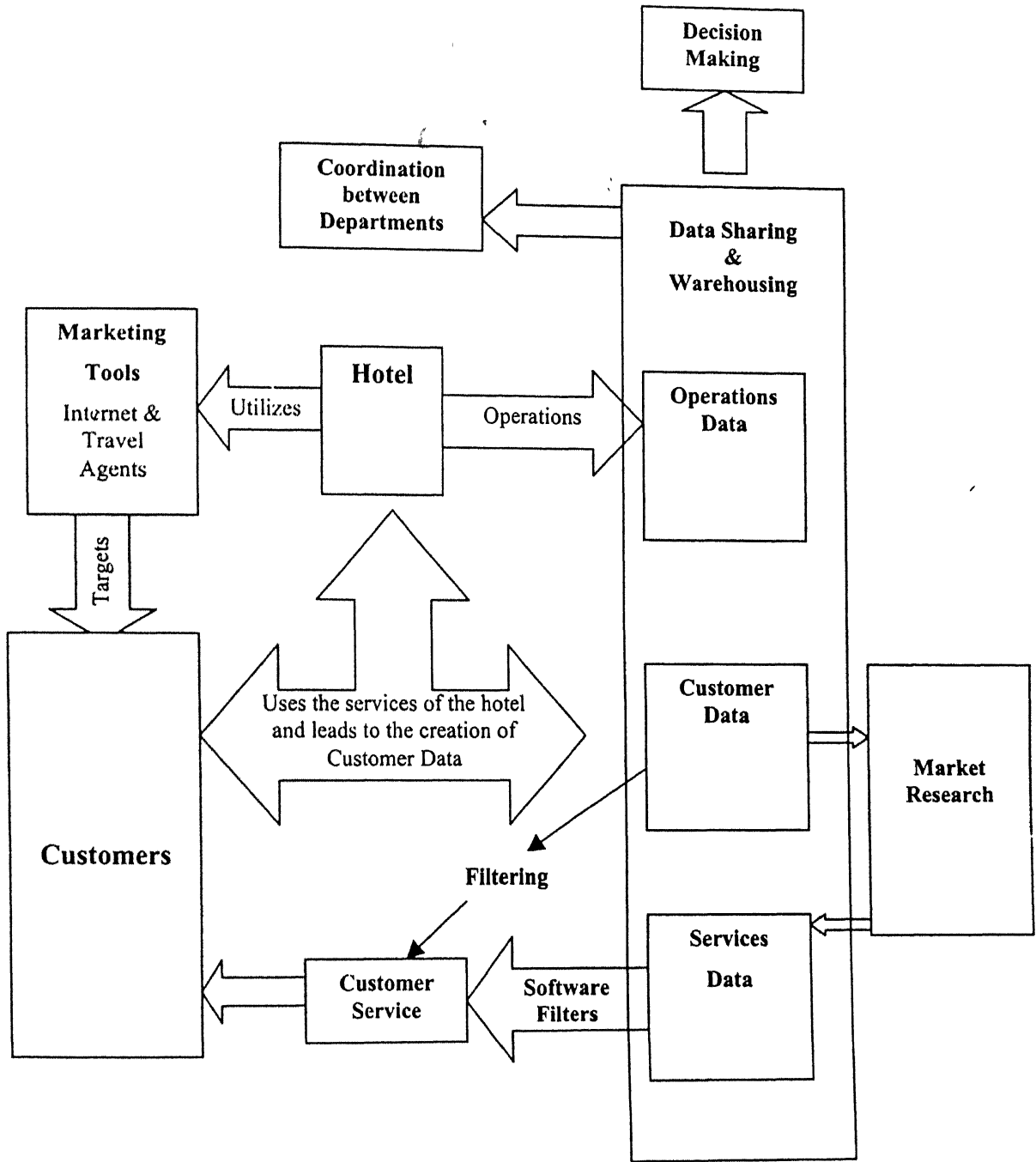


Exhibit 1: A model of effects of IT in Hotel Operations

This model is proposed from the conclusions drawn from this study. The above figure shows the three types of data and their use and sharing in hotels. The use of marketing tools to target customers and the software tools to filter information from the databases for customer service is also shown. The model also shows

how data sharing and warehousing helps in decision-making by the employees and coordination between departments.

8.8 Limitations of the study

The hospitality industry is quite diversified as evident from the discussion in the introductory chapter. The major limitation of the study is that it is confined to hotels of five star ratings, further the study is done on the hotels who have implemented IT in most of their service and internal operations, hotels with less IT are not included in the study.

The methodology used was exploratory type; it focused on system and services, and could not study the industry in a broader framework, like strategies, financial aspects and capital resource allocations.

The study was done from the views or opinions of the personnel working in various hotels; the view of the customer was not taken.

8.9 Scope for future work

There is much scope for further work on features like what is the contribution of each hotel in developing its own database, how much resources are allocated for outsourcing. What are the features of the data management, which are outsourced etcetera. Secondly, one could explore how the hotels identify the patterns in marketing their services and the role of IT in it. What are the marketing tools used by this sector for consumer research and in what way IT helps. Another aspect is how the industry responds to the changes in IT, to what extent the management adopts these changes, and what kind of training the industry provides to its employees to adjust to these changes. Also one can look into how the travel agencies respond to the Internet bookings of hotel facilities. How is the relationship with the intermediaries affected by Internet. Level of customer satisfaction being affected due to information technology is another area, which remains unexplored.

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Appendix

This is about your website if it contains the features as stated below then kindly tick✓ the relevant boxes

Hotel facilities details	<input type="checkbox"/>
Details about local and national tourism	<input type="checkbox"/>
Email address	<input type="checkbox"/>
Enquiry form, which can be printed out mailed or copied	<input type="checkbox"/>
Online reservation	<input type="checkbox"/>
Secure order forms or those requiring credit card transactions	<input type="checkbox"/>
Links to suppliers and sponsors	<input type="checkbox"/>
Links to travel agents	<input type="checkbox"/>
Other popular website link	<input type="checkbox"/>
Link to newsgroups	<input type="checkbox"/>
Bulletin boards & links to other web-community	<input type="checkbox"/>
Guest book for visitors to record comments	<input type="checkbox"/>
Request for information	<input type="checkbox"/>
Surveys of customer preferences	<input type="checkbox"/>

I am a student of IIT Kanpur and am conducting this survey as per the requirements of my M.Tech thesis.
All the information so obtained will be kept confidential and will be used for academic purpose only.

Sound & Audio files

Animation (gif, Flash, Macromedia, etc.)

Video clips (various file formats)

Real Player (streaming audio & video)

VDO Live (streaming video)

QTVR (Quick Time Virtual Reality)

Quick Time Movies

MPEG Movies

Shockwave (From Macromedia)

Database Integration & Ordering

Java Applets

Java Scripts

Dynamic Html Programming

Cascading Style Sheets (CSS1)

Special CGI or Perl Scripts

This is regarding the software applications in your hotel. Please fill in the relevant spaces

Department	Reports, records & procedures	Is any kind of software application available regarding this?	Time it takes to get relevant information and prepare the reports and update the records	Any kind of shortcoming do you find in the software packages while preparing these
Front Office	Reservation Chart			
	Room key Record			
	Night Room Report			
	Discrepancy Report			
	Room Report			
	Forecasting room reservation			
	Summary of charge record			
	Foreign currency transaction record			
	Credit card charge record			
	Cashier report/remittance of funds			
	Night auditor sales recapitulation			
	Night clerk Report			

I am a student of IIT Kanpur and am conducting this survey as per the requirements of my M.Tech thesis. All the information so obtained will be kept confidential and will be used for academic purpose only.

Department	Reports, records & procedures	Is any kind of software application available regarding this?	Time it takes to get relevant information and prepare the reports and update the records	Any kind of shortcoming do you find in the software packages while preparing these
Front Office	Departure Intimation control sheet			
Housekeeping	Maintenance order			
	Work order			
	Room report			
	Occupancy status report			
	Weekly stores list			
	Room linen control sheet			
Accounting	Daily sales recapitulation			
	Restaurant sales summary			
	Statement of bills exceeding limit			
Lobby	Lobby control sheet			
	Mails and messages			
Telephone exchange	Local, STD,ISD call voucher			
	Group and guest wake up call list			

I am a student of IIT Kanpur and am conducting this survey as per the requirements of my M.Tech thesis. All the information so obtained will be kept confidential and will be used for academic purpose only.

Department	Functions	Please name Software Packages in use	Any kind of advantages or shortcoming features of these packages
Front Office	Reception		
	Reservation		
	Accounting		
	Lobby		
Food & Beverages	Room Service		
	Restaurants		
	Supply Chain Management		
Housekeeping	Maintenance		
	Linen and laundry supply management		
	Floor supervision		
Miscellaneous	Telephone Exchange		
	Safety locker Management		
	Security		

I am a student of IIT Kanpur and am conducting this survey as per the requirements of my M.Tech thesis. All the information so obtained will be kept confidential and will be used for academic purpose only.

Marketing

Please fill in the blank spaces and put tick \checkmark in the relevant boxes.

1. What kind of competitive advantage if any, do you feel your organization have by maintaining its own website?

2. In what way do you feel Internet helps, or does not help, you in quick adjustments to marketing conditions?

3. Do you advertise on other websites?

No

Yes on a paid listing in a hotel association site

Yes as a banner on a popular website: _____
(Specify)

4. How useful, do you think, is your advertising on other web site?

Extremely useful

- Somewhat useful
- Marginally useful
- Useless
- Cannot say

5. What do you feel are the advantages and limitations of internet in targeting customers for your hotel?

Advantages:
Disadvantages:

6. What is the effect of your web-based marketing on total sales?

- Strong positive effect
- Positive effect
- Marginally positive effect
- No effect
- Cannot say

7. If you have any web-based participation in newsgroups & web communities, does it help you in improving your marketability?

- Yes substantially
- Marginally
- Perhaps not

Not at all

Can you give specific reasons for this?

8. What aspects do you see in your relationship with various travel agencies being affected due to information technology?

Advantages:

Disadvantages:

I am a student of IIT Kanpur and am conducting this survey as per the requirements of my M.Tech thesis. All the information so obtained will be kept confidential and will be used for academic purpose only.

ORGANIZATION BEHAVIOUR

9. Do you have to go for any special training sessions to learn this software packages?

Yes

No

If yes please specify the duration (in days)

10. Do you feel that you can work more independently with less help from your immediate supervisors with the help of these packages?

Strongly agree

Agree

Partially agree

Disagree

Strongly disagree

11. Does customer service become better or remain the same or become poor due to these software packages?

Excellent

Good

Remained same

Poor

Worse

12. Can you give examples, if any, of customers appreciating the information technology applications?

13. Has IT made your organization more decentralized?

Made it highly centralized

Made it centralized

Made it partially decentralized

Made it completely decentralized

14. In what way?

15. What do you feel about the existing level of transparency in your organization?

Highly transparent

Sufficiently transparent

Partially transparent

Less transparent

No transparency

16. In what way, if any, does IT help you in supervising a large number of subordinates?

17. In what way is the coordination between various departments in the hotel affected by IT?

18. In what way do you feel that the management of this hotel has become more (or less) professional with the incoming of information technology?

19. Total strength of your hotel

Top managers	<input type="text"/>
Middle level executives	<input type="text"/>
Other staff	<input type="text"/>

20. Has the introduction of information technology in your hotel increased or decreased the skill requirement of manpower?

In terms of **Computer** skills

Increased	<input type="text"/>
Remained the same	<input type="text"/>
Decreased	<input type="text"/>

In terms of **Professional** skills

Increased	<input type="text"/>
Remained the same	<input type="text"/>
Decreased	<input type="text"/>

21. How many branches do you have in India?

22. Does information technology make it more feasible to run hotels at many different locations?

Yes, definitely	<input type="text"/>
Perhaps	<input type="text"/>
I don't know	<input type="text"/>
Perhaps not	<input type="text"/>
Definitely not	<input type="text"/>

23. How many levels of hierarchy do you have?

24. How many departments do exist at present in your organization?